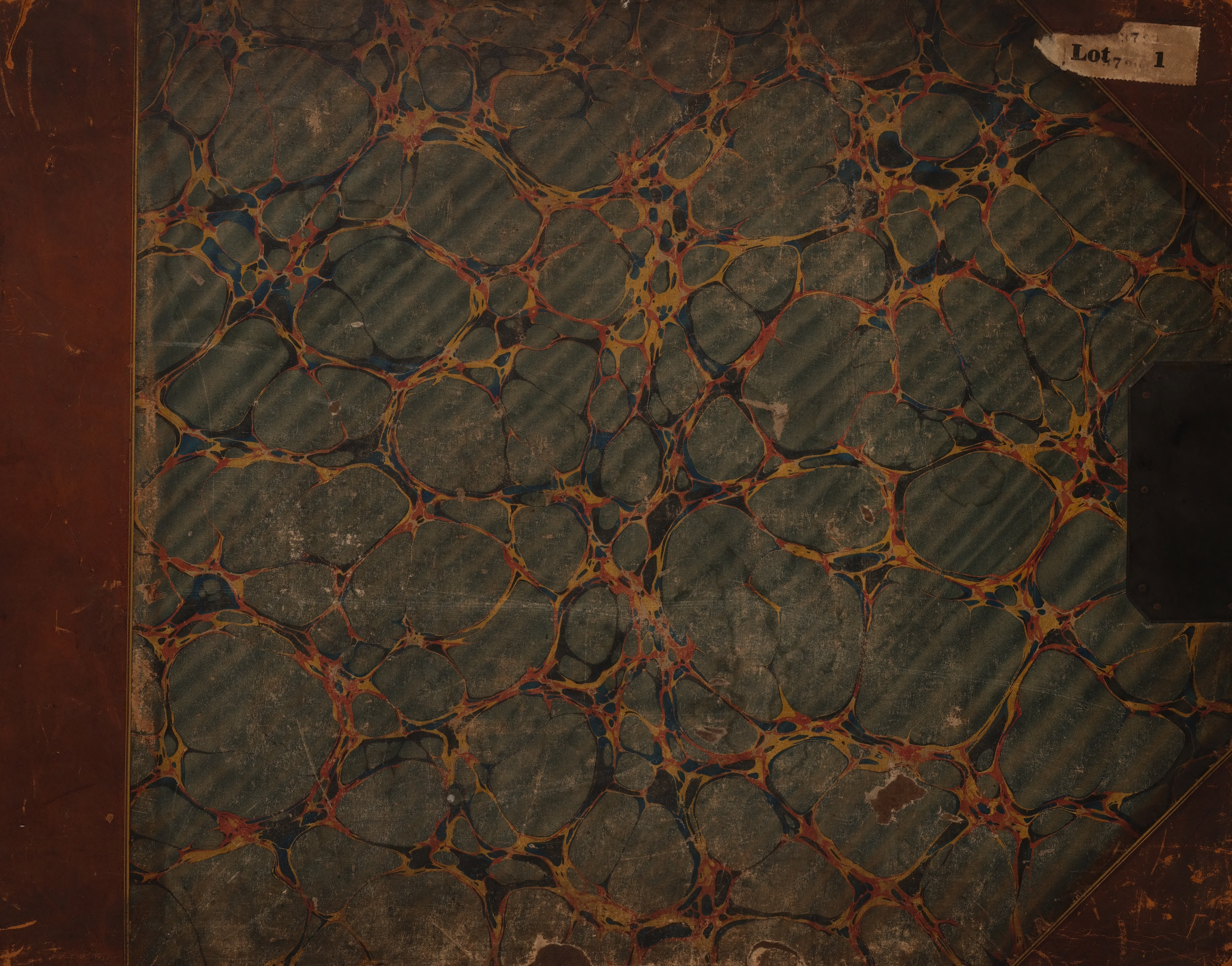


Lot 1



M. XXI. 12

F. 192

A
DESCRIPTION OF THE DIFFERENT VARIETIES
OF
OXEN,

COMMON IN THE BRITISH ISLES;

Embellished with Engravings;

BEING AN ACCOMPANIMENT

TO A SET OF MODELS OF THE IMPROVED BREEDS OF CATTLE,

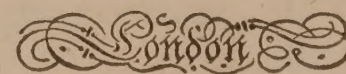
EXECUTED BY GEORGE GARRARD,

UPON AN EXACT SCALE FROM NATURE,

UNDER THE PATRONAGE

OF THE

BOARD OF AGRICULTURE.



PRINTED AND PUBLISHED FOR THE AUTHOR,

BY

J. SMEETON, ST. MARTIN'S LANE, CHARING CROSS.

FROM 1800. TO 1814

INTRODUCTION.

THE attention that is now paid to subjects of Rural Economy, aided by the recent establishment of a Board of Agriculture, cannot fail of producing the happiest effect in improving the cultivation of the Country, and the Stock of useful Animals, which consequently much add to the riches of these Islands and their dependencies.

It has always been the practice of polished nations to unite the elegant with the useful, and the polite with the necessary arts, which thus serve mutually to illustrate and assist each other, and render employment at the same time and upon the same subject, for the man of genius, and the man of labour; at once contributing to our pleasure and our necessities: producing rational amusement for the mind, and yielding healthy exercise for the body. And by interesting different classes of people in the same pursuit, tho' in different ways, additional energy and importance are given to the various occupations in life. The Board of Agriculture having patronized several attempts at delineating the Live Stock of different counties by Painting and Engraving, and it having occurred to the Author of this work, that a Picture (although it gives the most lively idea of colour, and general effect) rather exhibits a section or contour of the Animal, than its real image, as ideas of thickness cannot thus be adequately conveyed with those of length and height, he was therefore induced to make proposals for executing Models of the Improved Breeds of British Cattle, in which the exact proportion, in every point, should be accurately preserved. His plan was submitted to the Board of Agriculture, and had the honor of meeting with considerable encouragement, being referred by a Committee of that Board to the Duke of Bedford, and the Earl of Egremont.

MODELS were in consequence prepared from the best specimens that could be procured under the inspection of those noblemen, and being examined at a Committee of the Board of Agriculture, were much approved.

WITH such additional encouragement, and being desirous to obtain for works of this nature, a degree of estimation hitherto unknown in this country, he petitioned the Legislature, and succeeded in procuring the patronage of an Act of Parliament to secure the Copy-Right of all new Models in Sculpture, as well for the general benefit of the Art, as to appropriate to himself the right of disposing of casts from his own Models.*

THESE works are not intended merely as matters of curiosity, they exhibit, at once, the ideas of the best judges of the times, respecting the most improved shape in the different kinds of Live Stock—Ideas which have seldom been obtained without great expence and the practice of many years. It is presumed that, by applying to works of this kind, the difficulty of acquiring a just knowledge upon the subject may be considerably removed; and also, that distant countries, where they may be sent, will be enabled to form very perfect ideas of the high state of cultivation in which the domestic animals are produced at this day in Great Britain; and should further progress be made, these Models will shew what has already been done, and may be a sort of standard whereby to measure the improvements of future times.

* Upon the success of this undertaking, Mr. GARRARD had the honour to receive the congratulations and thanks of the Royal Academy.

THE varieties of the Ox species found in the British isles are numerous, twelve of the most distinct of which are given in this work. It has been a matter of some consideration, and much delicacy to settle the precedence between these different varieties, and the order of their succession; some claim it for those Breeds the individuals of which have, at times, sold for the highest prices, others for the best workers, feeders, &c. but it is perhaps possible, from the encouragement now given to researches of this nature, that the point in question, may eventually be determined.

The work is arranged in the following order :

- Nº. 1. DEVONSHIRE.
- 2. HEREFORDSHIRE.
- 3. LEICESTERSHIRE.
- 4. SUSSEX.
- 5. HOLDERNESS.
- 6. YORKSHIRE POLLED.

- Nº. 7. SUFFOLK POLLED.
- 8. SOUTH WALES, OR PEMBROKE.
- 9. NORTH WALES, OR ANGLESEA.
- 10. SCOTCH.
- 11. IRISH.
- 12. ALDERNEY.

THE DEVONSHIRE CATTLE.

THERE is great reason to suppose, that the Devonshire Breed has originated in the native black cattle of the island, now almost extinct, a few specimens of which being still to be found in the Highlands of Scotland, and in some parts of Wales. There is also a white breed of wild cattle, which class with them, which is preserved in Chillingham Park, Northumberland, and at Hamilton in Scotland.* The excellence of the Devon cattle may be attributed, not only to the mildness of the climate when compared with most other situations in Britain, being high dry ground, sweet pasture, and calcareous soil, where they are bred; but also to some mixture of finer blood from the still warmer Continent;† to which the difference of colour from the native originals may be ascribed, added to soil and management, in a long series of years. The district where they are bred in the highest perfection, is thus described in the *Annals of Agriculture*, No. 172, p. 330. “ It may be observed, that the breed begins at Barnstaple, and is traced by pursuing the river Tay as high as Chulmleigh, then to Tiverton on the Ex, Wellington, and nearly to Taunton; there turning north, strait to the sea, over the eastern boundary of the Quantoc Hills, to Stoke Courcy; from which place, on the eastern extremity, to the mouth of the Barnstaple River on the western, includes the whole, to the length of forty miles, and to the breadth across, from Tiverton to Minehead, of twenty-two. To the east of this range, the breed gets into a mixture of Gloucestershire, Welsh, and Upper Somerset; and more to the west of Devon, verging on the principle of the Cornish stock; to the south, the variety of South Hants is found, coarse, with a good deal of white and brown, and black and white mixtures, of uncertain properties. Exmoor is the highest point of the district thus defined.‡ It may be observed of this, as of all other breeds, that conclusions should be drawn only from the general appearance of the stock; certain it is, that individually handsomer bulls are often to be found in other breeds; and it is as certain, that this race, (of which almost the whole produce is brought to view, very few calves being killed,) stands the confessed favourite, or amongst the very first, at Smithfield, where prejudice cannot find the way; and, for activity in labour, they are held in the highest estimation.

A bull (in any handsome individual) is found with a horn neither drooping too low, nor rising too high, tapering at the point, and not thick or goary at the roots; colour, light yellow, or waxy; the

eye clear, bright, and prominent, with yellow colour round it; the forehead smooth and indented; the cheek small, and muzzle fine; the nose of a clear yellow, like the horn; the nostril high and open—a black nose to be avoided, as it is often demonstrative of a bad constitution. The shoulder low, and corresponding with the general thickness of the animal; the bosom wide; legs strait and fine; the back also strait, and wide across the loin and hips. The tail set on level with the back, something elevated, long, small, and tapering. The gaskins not too much cut away; nor, as in some breeds, heavy and loaded; which being of a second rate quality, is not desirable for profit. The bulls of this breed are said to be throaty, or with the skin too profuse and pendulous, and the neck thick and goary;”§ this circumstance claims some observation, as the oxen raised from these bulls have long been admired, not only for their strength and activity, but also for their light and neat shape, fine bone, and other high-bred qualities, from which we might conclude, that a bull shewing much blood, and in every other respect of fine shape, is not to be rejected on account of a thickness upon the neck, which perhaps only indicates a good constitution; as those secretions which Nature has so amply provided to clothe the bull’s neck with dignity, being otherwise disposed of in the ox, may be considered, as one of those secret causes which gains the oxen of this breed such distinguished reputation, both in the yoke and in the market.|| In respect to the ox, much depends upon the size of the rib, rotundity of the barrel, and mellowness of the skin; the two hind ribs bold, prominent, and widely independent of each other; the hips or pins on a level with the back, which is broad and strait; the hind quarters, from the pins to the catch or rump, long and well filled up, light in the fore parts, broad in the bosom, strait legs and fine bone.‡

The height of the oxen vary from 14 to 15 hands, but 14.2. is the general size: cows are from 11 to 12: bulls from 12 to 13: from which it appears, that the oxen of this breed grow to a large size in proportion to the bulls and cows, which is a proof of their native vigour.

The dairy practice in Devon is, of course, much limited, where breeding is carried on to such an extent. But if the principle be admitted, that a cow always yields a quality of milk in proportion to her quality of flesh, the Devons cannot be objected to as a dairy stock; and indeed, their reputation

* No circumstance, which relates to the different breeds of cattle, so eminently distinguishes them from each other, as the particular turn and length of the horn; and from this we are enabled to bring all the numerous varieties into four classes. First, the polled, or pollard breeds, which are without horns: second, the long horned: third, the short horned; and fourth, the middle horned. To this last class, the wild cattle, the Devons, Sussex, Hereford, and many other breeds evidently belong.

† It is considered, that there are no English cattle, sheep, horses, or swine, so early ripe and valuable, (or, perhaps, so beautiful) as when mixed with those of France, Spain, Arabia, and the Indies.

‡ See *Annals of Agriculture*.

§ See *Annals of Agriculture*.

|| The deer-like shape is considered by the first judges as the best model for improving the useful animals; and it is well known, that at a particular season, all the males of the stag tribe become thick upon the neck, which appearance increases every year, as also the size of the horn, till about the eighth or tenth year, when that character by degrees subsides, (which previously happens in cases of sickness or blemish); and if the animal is suffered to exist, the period arrives when the neck is no longer subject to that change, but remains thin, like the neck of the hind. Virgil informs us, that in his time, a cow was considered beautiful in proportion as she approached to the boldness and dignity of the masculine character; how different is the opinion of many at this day, who suppose that the beauty

of the bull is increased, as its form sinks into the slender and feminine appearance of a cow. The Godolphin Arabian, the sire of the finest breed of horses that, perhaps, ever existed upon the earth, and which is now the glory of Britain, was remarkable for thickness upon the neck; and many instances might be adduced to prove, that it is an appearance so generally to be found in high-bred animals, that it seems worthy of some inquiry how far it should be considered as a defect. Upon this subject something more may be said in the course of this work.

‡ They are yoked in at two or three years old, and worked lightly, from four to six, they will do a good day’s labour. They reach their utmost growth at six, but vary in the size. An ox of eighteen score a quarter will grow half a year after one of twelve. Oxen, upon the average forty-five score, are fatted in six or eight months, but twelve months is the general time allowed. The graziers like them best at five years old. It is remarked, that these oxen bear driving to London sometimes without the smallest waste, a distance of at least one hundred and thirty miles.

The price of a pair of oxen from the yoke, is from ten to twenty-five guineas. It is admitted in Devon and Somerset, where most of the plowing is done by oxen, that four good steers of the middling size, the largest not being the best for labour, will do the work of four heavy horses for a continuance. They will bear wintering in open sheds, and are said to thrive in that season sometimes better than the Highland Scotch, which may be attributed to their great spirit.

in this particular is increasing every day. The dairy practice is so well established at Epping in Essex, that the place is become proverbial for butter. Here, a few years since, a considerable proprietor, Mr. Conyers, was induced, from the character of the Devon cattle, to purchase twenty-four heifers and two bulls, and found them answer so well, that he has since doubled the number of his cows; and many proprietors and farmers in the county have sent for considerable lots of Devon cows, either for dairies, or as nurses for calves; and other persons, in various parts of the kingdom, are following their example.* The cows have generally a good carcase, well loined, wide at the hips; square in the quarters, with fine head, and bone; low on the legs; and being wide in the bosom, they deceive the eye of those who suppose them to be a small breed of cattle. Some of the cows have been known to give two pound of butter per day; but half that quantity is the average of the best Devon cattle. The price of a cow and calf is from £9. to £15.; the calves fat well, and fetch the best price; but they are small, and on that account not so profitable for veal as many other breeds.

In point of skin this breed is amongst the thinner classes, but improve much in tanning; and their tallow is of an extraordinary good quality.

The colour of the cow varies from a light blood red to a dark mahogany; with the face, knees, and hocks sometimes approaching to black. The bulls nearly the same, but are generally dark in the

head and fore quarters, mottled on the sides and back, which often approaches to sandy yellow, something like the Norman cattle, to which they seem to claim some kindred.

The oxen are often long in the coat; and a glossy mahogany, with waving curls, is held in great esteem; any white, except the tip of the tail, is objected to, as shewing a mongrel tendency.

The cow given in this work, was bred by Mr. WHITE PARSONS, as also the bull, both in the possession of the EARL of EGREMONT: the latter obtained the prize at Lewes in 1797. The beautiful heifer shewn by the DUKE of BEDFORD at Smithfield meeting in 1799, which obtained the prize, and was sold for forty guineas, was bred by the same gentleman, and was of the true North Devon breed; the best individuals of which stock are now worth one hundred guineas a pair for breeding. The ox was done from one in the possession of the DUKE of BEDFORD, and was in that yoke of oxen, mentioned in the Annals of Agriculture to have been purchased of Mr. PIPPINS of Dulverton, to carry on the experiments at Woburn.

The varieties of this breed are spread over a great part of the West of England; they extend along the sea coast from Sussex to the Land's End in Cornwall, and have received the general appellation of the West Country oxen.†

* See Annals of Agriculture.

† The following observations from such a successful breeder of Devon Cattle, as Mr. White Parsons, cannot fail of being interesting; they are extracted from a Letter to the Author, dated West Camel, April 14th, 1800.

I HAVE ever considered the high rising fore end, so much objected to in the North Devon Bull, as the sure mark of the best blood and quality. It is their high spirit and superior form of action, which makes them hold up their heads like blood horses of the Arabian extraction. The sum total of all I know, as a breeder of cattle, and which is much at your service, amounts to this; that the fine early ripening quality of flesh, the effect of climate, &c. is sure to be connected with small dense bone, and the richest milk, tallow, and manure, which is every thing, as far as the profitable enquiry extends; and nothing, I believe, is

more deceitful and unprofitable than that sort of beauty and rotundity of shape in horses, sheep, and cattle, which is so apt to cheat the eye; for it strikes me, that the best general prototype for all the useful animals, deserving to be of the first class, is of the reverse description; and that there is but one principle and right road, leading to perfection, for breeders to go by: it being observed, that the best sheep, and cattle in the island, are only to be found, with very few exceptions, in the southern quarters, nearest the sea; and if the Devons, as the purest, and earliest ripe sort, owing to their having been bred in the warmest climate in England, are capable of improving all others, as I contend they are; does it not follow, that it must be right for a Devonshire breeder to cross the channel for Norman, or the warmer blood of Spain or Arabia, and even to pass the equator for the blood of India? as from experience we know, that most of the good things we have to boast of in this country, whether animals or vegetables, have been brought in at the eastern or southern gates.

DIMENSIONS OF THE DEVONSHIRE CATTLE, GIVEN IN THIS WORK.

							BULL.			COW.			OX.		
							Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the	Hind Quarters	—	—	—	—	—	4	4	$\frac{1}{2}$	4	0	0	5	0	$\frac{1}{2}$
	Shoulder	—	—	—	—	—	4	5	$\frac{1}{2}$	3	11	0	5	0	$\frac{1}{8}$
	Knee	—	—	—	—	—	1	0	0	1	1	0	1	2	$\frac{1}{4}$
	Hock	—	—	—	—	—	1	8	0	1	5	0	1	9	$\frac{1}{2}$
From the Ground to the	Brisket	—	—	—	—	—	1	7	$\frac{3}{4}$	1	7	0	2	0	0
	Chest	—	—	—	—	—	1	9	$\frac{1}{2}$	1	8	$\frac{1}{2}$	2	1	0
Length of, or from the	Rump to the Extremity of Hip Bone	—	—	—	—	—	2	2	$\frac{1}{2}$	1	9	$\frac{1}{2}$	2	4	0
	Pole to the Tale	—	—	—	—	—	7	0	0	5	1	$\frac{1}{2}$	7	8	0
	Face	—	—	—	—	—	1	8	0	1	7	0	1	9	0
	Horn	—	—	—	—	—	1	4	0	1	0	0	1	10	0
	Chap	—	—	—	—	—	1	7	0	1	5	0	1	10	0
	Cheek and Forehead	—	—	—	—	—	3	6	0	2	11	0	3	6	0
	Neck	—	—	—	—	—	3	4	0	2	6	0	3	3	0
Round the	Chest	—	—	—	—	—	6	8	$\frac{1}{2}$	5	11	0	6	11	0
	Knee	—	—	—	—	—	0	11	$\frac{1}{2}$	0	11	0	1	2	$\frac{1}{2}$
	Bone of Fore Leg	—	—	—	—	—	0	7	0	0	6	$\frac{1}{2}$	0	9	0
	Coronet of Fore Foot	—	—	—	—	—	1	1	0	1	0	0	1	3	$\frac{1}{4}$
	Hock	—	—	—	—	—	1	4	0	1	1	0	1	7	$\frac{1}{2}$
	Bone of Hind Leg	—	—	—	—	—	0	8	0	0	7	$\frac{1}{2}$	0	10	0
	Coronet of Hind Foot	—	—	—	—	—	1	1	0	0	11	$\frac{1}{2}$	1	2	$\frac{1}{2}$
	Horn	—	—	—	—	—	0	10	0	0	6	$\frac{1}{2}$	0	10	$\frac{1}{2}$
Breadth of the	Face across the Eyes	—	—	—	—	—	0	8	$\frac{1}{2}$	0	7	0	0	8	$\frac{1}{2}$
	Hips	—	—	—	—	—	1	11	0	1	10	0	2	1	$\frac{1}{2}$



Engraved by G. G. G. and London. July 18.th 1799.

A DEVONSHIRE BULL.



Engraved from a drawing by J. H. P. 1840

A DEVONSHIRE COW.



Pub. by G. Gurnard, London, July 18th 1799.

A DEVONSHIRE OX.

THE HEREFORDSHIRE CATTLE.

*THE excellence of an animal, it must be confessed, in a great measure depends upon the soil where it has been bred, and the land upon which it is fattened: without doubt, therefore, we are much indebted to the rich pasture by the Wye and the Lug side for that perfection which so eminently distinguishes the Herefordshire Cattle. These noble animals are found in the highest state of beauty and condition within about seven miles round the City of Hereford; but very fine stock may be met with in various parts of the country: about Leominster there are some very good cattle bred, and near Ross also; two places very distant from each other: there are likewise excellent oxen bred near Ledbury, and many other places.

The best Herefordshire Cattle display all those points which are considered as marks of true beauty in the finest specimens of British Cattle; such as a light fore end, broad and deep bosom, strait back, and a round barrel, produced by a broad projecting rib—the loins broad, the hip-bones spreading wide, and standing high and level with the top of the back, and pushing forward to the first rib—long and flat quarters, &c.; and considering the size and weight of these animals, they are remarkably small in the bone, but the feet are more spread than those of lighter cattle. The oxen are in great repute for purposes of husbandry, the plowing in the County of Hereford being almost wholly done by them.†

The height of the bulls is generally from 13 to 14 hands; the cows about 13; oxen from 15 to 17, or 17,2, and 18; but 15 or 15,2, is the common height of the working oxen‡.

The colour of this breed is red or brown, with a white or mottled face; some having circles of flesh-colour or yellow round the eyes, and a white circle round the ears at the insertion; a streak of white along the top of the neck to the shoulder; the under part of the throat white, and so continued

along the belly to the setting-on of the tail, which should rather project. The legs are also often white, or equal parts white and brown, or red spotted, according to the colour of the animal; mostly having a white tassel at the end of the tail.

The Bulls, like those of Devonshire, are apt to be high and thick upon the neck, which cannot be considered as a blemish, it being peculiar to the bull only, and is undoubtedly the effect of health and high blood.

The horns of this breed of cattle are very distinct: those of the bull are from one foot to one foot four inches long, and about 10 inches round, at the insertion; they spring low, and back from the head; the first direction is rather backwards, then curves sideways and forwards, deviating but little from a strait line, the points rather inclining downwards. The cows horns are from one to one foot two inches long, and from six to seven inches round at the setting on; the shortest horns are generally the thickest: no cow is found with more delicate horns—springing rather high from the head, they take a direction sideways, curving forwards, upwards, and backwards, the points approaching each other. The horns of the oxen are from two to two foot six inches long, and about 10 or 11 inches round at the insertion; like those of the bulls, they are placed low and back on the head, first projecting backwards, then curving sideways and forwards, then upwards, backwards, and outwards, the points turning from each other. The horns of the Herefordshire cattle change in different specimens, from that variety which is always to be found in nature; they may be more or less elevated, longer or shorter, but they will be found mostly to take the form here described.

* The Author is indebted to Mr. LECHMERE, of Rydde, near Worcester, for many of the particulars in the following description of Herefordshire cattle.

† It is allowed, when worked singly, that four or five oxen will plow as much ground, day by day, as the same number of horses, of about 15 hands high—against a steep bank the oxen seem to suffer less than the horses, and excepting the hot summer months, they are the more desirable stock to cultivate the land with: working them double is the best mode during the hot months, as they are apt to be unruly, on account of the flies. In comparing them with horses, much must depend upon their condition; there is no doubt of four being equal to three horses. Mr. CLARK, in his remarks upon the mode of husbandry pursued in the County of Hereford, having made some observations upon the very indifferent sort of draft-horses in that country, concludes by saying, that the worthy inhabitants have not committed any blunder in making the ox their favourite hobby-horse; and adds, that any attempt to change the present breed of their neat cattle, would exhibit the most glaring instance of folly.

‡ Mr. LECHMERE thus describes the breed:

“The face should be long and taper, the middle of the forehead broad, and rather inclining inwards, which is effected by the hollow of the skull that contains the eyes, being rather projecting; the eye-balls prominent and brisk; the lids thin, and well stored with eye-lashes, which, as in the human species gives a general expression to the features. The setting-on of the head and neck remarkably fine and elegant, and afterwards progressively leading down to a full and deep bosom, guarded on each side by the points of the shoulder, being neatly let into the line of the neck, and inclining rather upwards, so as to produce that even appearance which is so striking in the Herefordshire cattle, beginning at the closing of the shoulders, and running on all along the top of the chine. If a contrary shape occurs, and the points of the shoulder push downwards, the consequence is evident; the neck appears out of proportion; the weight or strength which ought to be in the closing or junction of the shoulders at top is destroyed; and the end of the chine at that part is thin and hollow, so that the whole frame forward is completely deprived of that due symmetry it ought to possess. The ribs, all the way from the part just alluded to, should begin pretty early to project after its junction, or springing forth from the back-bone; and this effect is more especially necessary in what we call the first rib, or that nearest the hip, which

“cannot be too broad or projecting, and should be pretty near the hip or free-bone. By this early inclination to project, the upper part of the ribs support a full chine, which is of as great value as any, in the scale of provision, and cannot bear an equal apparent weight, in a flat or weak-sided cow or ox; and by the first rib and hip coming near altogether, the under loin is kept up and supported to the hand of a skilful judge, which, though a beast may be fat, cannot be equally the case, where these two parts are far asunder, and there is a disproportionate vacuum.

“I next come to remark the situation of the hip-bones, which I look upon to be the most essential parts to add beauty, weight, and value to every sort of beast that comes under the description of horned cattle. These cannot stand too wide, or in my idea too high on a level with the top of the back, running straight for the two extremities. The distance to the point of the rump should be long, taking the atch-bones upon as exact a level as possible; for where these project, or come out at all so as to equal the prominence of the hip, it is impossible for a beast to come well to handle, as they will be hard and similar to most bulls to touch, and cannot get fat in those points most requisite to make a fat animal desirable. The points or ends of the rump on each side the tail should when poor be well supplied with loose skin, and be soft so as to allow room for expansion, as the creature progressively fills out in feeding; and these points should stand rather high, so that the root of the tail may be guarded on each side; for when this is not the case, and the points of the rump are low, the tail stands high, and disfigures the animal, and they seldom are so well inclined to load with fat on that part. There are gristles at the setting-on of the tail, which should rather project on each side, even when cattle are poor, as I have ever observed, they accumulate much more fat in this part, which is very essential to the sale of a beast. These cattle are generally short, and full in the thigh; for where they are of a contrary shape, they never fill out well in the twist, or that part leading from the tail to the udder of a cow, which is of infinite consequence to the weight of the round of beef, after the animal is slaughtered.

“Let it be observed, that the bone being small below the knee and hock is a singular perfection; and it commonly happens, that the fattest animals have the most slender bones to support their weight.”

As breeding is the first object with the Herefordshire farmer; the dairy, of course, is not much considered, and the quantity of milk that an individual cow may give, is not often ascertained. The calves are kept with the cows; and the farmer only attends to the dairy, as a convenience for his own family: but it is said, that the average of a good dairy (of which there are a few) is about 3 cwt. of cheese in a year from one cow, or two pounds of butter by the day through the summer—the calves are of a thrifty nature, the veal of a fine grain, and weighs from 24 to 40 pounds per quarter, at six or nine weeks old. The cows when fatted weigh from 9 to 12 score the quarter, sometimes from 15 to 16. Oxen from 14 to 18 or 20 score the quarter. They have thin hides, and the weight is proportioned to the size of the animal. There is a smaller breed of cattle in Herefordshire, which seems to be crossed with some of the coarser Welsh Breeds, that have a much harder and heavier hide than the larger sort, which shews their excellence in nothing so much as in having a fine soft skin, and small bone. Seven or eight years back a good cow and calf was worth from 12 to 15 guineas, which at

present would fetch from 18 to 25. A pair of steers, or young oxen for work, then worth £28. now will fetch £38. and such oxen from the yoke that were worth £18. each, will now produce from 26 to 30, or more. At Smithfield market, Christmas, 1799, a butcher of Reading, gave 100 guineas for an Ox of this breed; and there were two others sold for £100. each, fed by Mr. WESTCOT, of Creslow, in the Vale of Aylesbury. The Smithfield Society adjudged the prize to one of them; it was bred by Mr. TULLY*, of Hunterton, within two miles of Hereford; and weighed 1928 lb. and carried 288 lb. of fat; the tongue sold for £1. 1s. and the hide for £3. 3s. The dimensions of this Ox is given, as also that of which the plate is engraved, which was in the possession of the DUKE of BEDFORD. The Cow from which the plate is engraved, was the property of the EARL of EGREMONT. The measurement is also given of a Cow of the DUKE of BEDFORD. The print of the BULL was from the EARL of EGREMONT's stock.

* Mr. WESTCOT has since purchased six oxen from this same farmer at 35 guineas each, to fatten.

DIMENSIONS OF THE HEREFORDSHIRE CATTLE GIVEN IN THIS WORK.

							1	2	3	4	5
							BULL.	EARL of EGREMONT's COW.	OX.	DUKE of BEDFORD's. COW.	FAT OX.
							Ft. In. Qr.	Ft. In. Qr.	Ft. In. Qr.	Ft. In. Qr.	Ft. In. Qr.
Height of the	Hind Quarters	—	—	—	—	—	4 7 0	4 5 0	5 0 ¼	4 5 0	5 2 ½
	Shoulder	—	—	—	—	—	4 6 0	4 3 ½	5 0 ¼	4 3 0	5 2 ¾
	Knee	—	—	—	—	—	1 1 0	1 0 0	1 3 0	1 1 0	1 1 0
	Hock	—	—	—	—	—	1 7 0	1 7 ½	1 10 0	1 7 ¾	1 9 ½
From the Ground to the	Dew Lap	—	—	—	—	—	1 6 0	1 6 0	1 7 0	1 6 ½	1 8 0
	Brisket	—	—	—	—	—	1 8 0	1 7 ¼	1 8 0	1 7 ¾	1 8 0
	Chest	—	—	—	—	—	2 0 0	1 9 ½	2 0 0	1 9 ¾	1 9 0
	Rump to the Extremity of Hip Bone	—	—	—	—	—	2 0 ½	2 2 ½	2 5 0	2 2 0	3 0 0
Length of, or from the	Pole to the Tail	—	—	—	—	—	7 6 0	6 8 ¾	7 8 0	6 7 0	7 9 0
	Face	—	—	—	—	—	1 9 0	1 9 0	1 9 0	1 6 ½	1 10 0
	Horn	—	—	—	—	—	1 0 0	1 2 0	2 0 0	1 2 ½	2 6 ½
	Chap	—	—	—	—	—	1 10 0	1 6 0	1 10 0	1 7 ½	1 10 0
Round the	Cheek and Forehead	—	—	—	—	—	3 7 0	3 3 ¾	3 11 0	3 6 0	4 2 0
	Neck	—	—	—	—	—	3 5 ½	3 0 0	3 7 0	3 0 ½	3 11 0
	Chest	—	—	—	—	—	6 9 0	6 7 0	7 11 0	6 9 ½	9 3 ½
	Knee	—	—	—	—	—	1 2 0	1 0 0	1 2 0	1 0 0	1 4 ¼
	Bone of Fore Leg	—	—	—	—	—	0 8 ½	0 7 0	0 9 ½	0 7 ½	0 9 ½
	Coronet of Fore Foot	—	—	—	—	—	1 3 0	1 1 ¾	1 3 ¾	1 1 0	1 5 ½
	Hock	—	—	—	—	—	1 5 ½	1 2 0	1 7 0	1 4 0	1 8 0
	Bone of Hind Leg	—	—	—	—	—	0 9 ¾	0 8 ½	0 10 ¾	0 9 0	0 10 ¼
	Coronet of Hind Foot	—	—	—	—	—	1 1 ½	1 0 0	1 2 0	1 1 0	1 2 ¾
	Horn	—	—	—	—	—	0 10 0	0 7 0	0 11 0	0 6 ½	0 10 0
Breadth of the	Face across the Eyes	—	—	—	—	—	0 11 0	0 8 0	1 0 0	0 8 ½	1 1 ¼
	Hips	—	—	—	—	—	2 0 0	2 1 0	2 4 ½	2 1 0	2 10 0

The Models were executed from the above measurements, 1, 3, 4, 5, upon a scale of 2¼ inches to a foot.



Pub. by G. Garrard, London. Aug. 1st 1800.

HEREFORDSHIRE BULL.



Pub. by G. Gairard, London, Aug. 1st 1800.

HEREFORDSHIRE COW.



Pub. by G. Garrard, London, Aug. 1st 1800.

HEREFORDSHIRE OX.



London, Pub. August 20, 1801, by G. Garrard, Agricultural Museum, 28, George St. Hanover Sq.
A FAT HEREFORDSHIRE OX,
Bred by M. Tully of Hunterton near Hereford, & fattened by M. Westcar of Credow in the Vale of Alesbury.
Dead Weight 1928^{lb}— 288^{lb} of Fat. 6 Y.^{rs} Old. It obtained a Prize from the Smithfield Society, Christmas 1799.

THE LONG-HORNED CATTLE.

THE Breed of Long-Horned Cattle* has been established for time immemorial, in the North of England, where we find them spread over a large tract of country, comprehending part of Yorkshire, particularly the Craven District, part of Westmoreland, Lancashire, Cheshire, and over the shires of Derby, Stafford, Shropshire, Warwick, Leicester, Worcester and Northampton; and they have been occasionally dispersed through the adjoining counties. Within these forty years they were so exclusively the stock of the South of Staffordshire, that an individual of any other breed would have been gazed at as a new animal. In their unimproved state, they are hardy, readily grow fat, when not in milk, and produce excellent beef; with hides much valued by the tanners.†

The common sort of this breed are not of an extraordinary value at market; a few years since from £5. to £10. was the price of a cow in calf, or with a calf; and they are still sometimes to be bought within that price. But the better sort of common stock are now advanced to from £10. to £20. and cows, when fatted, from £10. to £25. each.

As to the general merit of the stock for the Dairy, from 16 to 24 quarts, at two meals per day, is the usual produce; but some individuals will give much more. In Staffordshire, cheese is the principal object, and five hundred weight of 120^{lb}. is often made from one cow in the year; but three hundred weight is a more common produce. A few of the prime bull-calves are reared, and not many oxen, their use in draught being generally superseded by horses.

Heifer and Cow stock, when fatted, generally weigh from 8 to 12 score per quarter; instances have been known of much greater weight; many cows have been fatted to sell for 25 guineas each; two fat cows, of Oxley Farm, near Wolverhampton, were sold for 40 guineas each; and oxen, in a growing state, have been sold for 37 guineas. These observations may be applied to the common sort of Long-Horned Cattle; but we have a very different account to give of their present highly improved state.

Some regard was long since paid to the improvement of the Long-Horned Cattle, by those whose situations had thrown them upon good pasturage; the fertile banks of the Trent and the Dove were particularly adapted to this kind of stock; and here good cattle of this breed has long been common; but in the arable parts of the country, attention to cattle having been a secondary consideration, their improvement has been a more recent business.

Great exertions have been made for some years past, and the emulation excited has occasioned prices to be given that have astonished the public.‡

Early in this century, a Mr. WEBSTER brought some Long-Horned Cows from the Banks of the Trent to Canley, near Coventry, in Warwickshire; they were derived from SIR THOMAS GLASBY'S Breed, which are said to have been originally brought from Westmoreland and Lancashire. With respect to colour, six of his best cows were red; the other colours most approved of, were the brindled, finch back, and the pied.

About the year 1750, Mr. ROBERT BAKEWELL, of Dichley Farm, near Loughborough, in Leicestershire, being then about twenty-two years of age, began to pay particular attention to the improvement of the different kinds of live stock. The Dichley-Cow stock, which has acquired much distinguished celebrity, originated from some of the Canley heifers crossed with a Westmoreland bull, procured by Mr. BAKEWELL. From this cross was produced his famous bull Two-penny. In a few years, his cattle became in great request; and from the difficulty, time, and expence which it had cost him to acquire his prime stock, he was rather cautious in parting with it; and therefore he established a new system in the mode of improving stock, which was, to let out for one season only his bulls and other male stock, this answered so well, that by the year 1770, he had many bulls let out from 5 to 30 guineas each for the season; his famous bull Two-penny had covered at five guineas per cow; and he had at that time many cows which were worth 30 guineas each. His breed was anxiously sought after by the most respectable breeders, of his own and the neighbouring counties; and the Dichley stock, at this time, under the care of Mr. HONYBORN, the nephew and successor to the late Mr. BAKEWELL, is considered as undoubtedly the neatest and most beautiful of the Long-Horned Breed. Respect will long be paid to the memory of Mr. BAKEWELL. To the exertions of this great man, we may trace the establishment of the Board of Agriculture, also the spirit of enquiry which has taken place in rural affairs, and the improvement of Live Stock in particular: from which it is now discovered, that we have several Breeds of Cattle nowise inferior to the improved Long-Horned Breed; and as fine shape is more generally diffused than was formerly imagined, we must not expect to see the individuals of any breed produce such prices again, as stated in this account.

* The Author is indebted to Mr. PITT, of Pendiford, in Northamptonshire, for the most part of the following description of the Long-Horned Cattle.

† It may be singular, perhaps, to hint, that thick hides are an object worthy of attention in breeding; but we may conclude that they are, from the great price which the hides of the Long-Horned Cattle generally produce, bearing an advance of 10s. more than most other hides; and many instances have occurred of those hides selling for more per pound than the beef. At Wolverhampton, in October, 1799, Hides sold for 5*d*. and Beef 4½*d*. and 4*d*. per lb.; and although the hide is of such thickness, there is yet that mellowness in the handling of these cattle, which always indicates a disposition to fatten: And the importance of the leather-trade is to be taken into consideration, as connected with the home consumption, and commercial interests of the country.

‡ Mr. FOWLER, of Rolwright, in Oxfordshire, was not long after Mr. BAKEWELL, in his attention to Cow-stock; he also began his improvements with two cows from Mr. WEBSTER'S stock, to which he hired Mr. BAKEWELL'S bull, Two-penny; and this cross produced the cows called Long-Horned Beauty and Old Nell. He had also other bulls of Mr. BAKEWELL, the last of which, in the year 1778, called D, was the sire of Shakespear. From that time he kept entirely to his own stock. The prices given for Mr. FOWLER'S cattle, in 1791, are well known, yet it may not be improper to give some account of the sale, in this place.

BULLS.				£.	s.	d.	COWS.				£.	s.	d.
Garrick, five years old	-	-	-	250	0	0	Brindled Beauty, by Shakespear	-	-	-	273	0	0
Sultan, two years old	-	-	-	220	0	0	Sister to Garrick	-	-	-	120	0	0
Washington, two years old	-	-	-	215	0	0	Nell, by Ditto	-	-	-	136	0	0
A, one year old, by Garrick	-	-	-	157	0	0	Young Nell, by Brother of Ditto	-	-	-	126	0	0
Young Sultan, one year old	-	-	-	210	0	0	Black Heifer, Ditto	-	-	-	141	0	0
E, one year old, by Garrick	-	-	-	152	0	0	Washington's Mother	-	-	-	194	0	0

Fifty-three head of cattle produced £4,289. 4*s*. 6*d*. from which we discover the high degree of emulation that had been excited. Many instances have occurred of great price, both of the letting and sale, of the improved Long-Horned Breed of Cattle. In 1784, Mr. PRINCEPS, of Croxhall, had Shakespear two seasons, at eighty guineas the season. In 1795, Mr. PADGET'S improved stock was brought to the hammer, when his bull Shakespear, bred by Mr. FOWLER, off Young Nell, was sold at 400 guineas; the seller reserving a right to send two cows to him yearly. He afterwards covered at 25 guineas. Mr. PADGET'S Cow-stock sold at from 50 to 80 guineas each.

The improvement made in this breed of cattle, since the first efforts of Mr. BAKEWELL, are chiefly these:—the coarser parts have been lessened, and the more valuable enlarged; the bone is smaller; they are become finer in the neck, throat, and bosom; the back strait, wide, and loaded with flesh; the rump thick, and fleshy on the points, often with hillocks of fat about the roots of the tail, and that even when the animal is in common condition; the flank feels thick and fleshy, and the beast handles in every part loose and mellow.

These points were always esteemed in the breed, but were not thought attainable, except on the finest and best land. The ingenuity and perseverance, however, of Mr. BAKEWELL, and his followers, have in a great measure proved to the contrary; and it is found, that well-bred cattle will do better with ordinary food than those of an inferior kind.*

We find the breed thus described by Mr. MARSHALL. “The fore-end long, but light, to a degree of elegance; the neck thin; the chap small and clean; the head fine, but long and tapering; the eyes large, bright, and prominent; the horns varying with the sex; those of the bull are comparatively short, from 15 inches to 2 feet; those of oxen from 2 feet 6 to 3 feet 6; those of the cows nearly as long, but much smaller, tapering to delicately fine points.” The Horns are variously disposed, sometimes taking a direction wide spreading in a strait line from the head; sometimes inclining forwards with the points turning upwards; but the most common direction is that of bending outwards and downwards, in a line with the cheek; the points more or less approaching each other, sometimes crossing the nose, or bending under the throat. Many of these peculiarities have by turns been considered as the most beautiful, and have frequently made the difference of between three or four guineas in the value

of the animal. “The shoulder remarkably thin and fine; in respect of bone, thickly covered with flesh; the girth small, compared with the short and middle horned breeds; the chine remarkably full when fat, but hollow when low in condition; the loin broad; the hips remarkably wide; the quarters long, and level; the neck of middle width; tail set on variously; the round bone small; thighs fleshy, but tapering towards the gambrells; the legs small and clean, but comparatively long; the foot neat, and of a middle size; the carcase as nearly a cylinder as the natural form of the animal will allow; the ribs standing out bold from the spine, and receiving the intrails within them; the belly, of course, appears small.” It is said repeatedly to have been ascertained by Mr. BAKEWELL, that the Long-Horned Breed of Cattle kept themselves in good condition with less food than other breeds; and this is now a pretty general received opinion, and is supposed to have determined his choice in favour of them.

The print of the BULL given in this work was executed from a picture made in January, 1796, from Mr. HONYBORN's bull, called G. N. then three years old. The dimensions of the animal were not at that time taken; the Author has therefore given the measurement of a bull of the same stock, by G. N. three years old. The Cow is also from the Dichley stock. The print and measurement given of the Ox, were taken from one in the possession of the DUKE of BEDFORD, bred by Mr. WALTON, of Ibstock, off Bandy, by Mr. PADGET's Shakespear. Dimensions are also given of that beautiful Ox, bred and fattened at Dichley, which was shewn at Smithfield, Christmas, 1799; five years old, got by Mr. PADGET's Shakespear, off Dandy. See Mr. PADGET's catalogue.

* In 1786, Mr. PRINCEPS had a cow slaughtered, weighing 18 score each fore quarter, and 18 score 13 pound the hind quarters; 126^{lb}. of tallow; and it was six inches thick of fat upon the chine. About the same time there were two oxen fed at Fisherwick, at the MARQUIS of DONAGAL's, one of which weighed 99 score 8^{lb}.; 200^{lb}. of tallow; hide 177^{lb}.

DIMENSIONS OF THE LONG-HORNED CATTLE GIVEN IN THIS WORK.

						BULL.			COW.			OX.			FAT OX.		
						Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the	- - -	Hind Quarters	—	—	—	4	8	$\frac{1}{2}$	4	4	0	4	10	0	5	2	$\frac{1}{2}$
		Shoulder	—	—	—	4	7	0	4	1	0	4	8	0	4	10	$\frac{1}{2}$
		Knee	—	—	—	1	1	$\frac{1}{2}$	1	1	$\frac{1}{2}$	1	2	0	1	2	0
		Hock	—	—	—	1	5	0	1	6	0	1	10	0	1	8	0
From the Ground to the	- - -	Brisket	—	—	—	1	7	$\frac{3}{4}$	1	8	$\frac{1}{2}$	1	8	0	1	6	0
		Chest	—	—	—	2	0	0	1	8	$\frac{1}{2}$	1	9	$\frac{1}{2}$	1	8	0
Length of, or from the	- - -	Rump to the Extremity of Hip Bone	—	—	—	2	4	0	2	1	$\frac{1}{2}$	2	4	$\frac{1}{2}$	2	7	$\frac{1}{4}$
		Pole to the Tail	—	—	—	7	6	0	7	0	0	7	1	0	7	4	0
		Face	—	—	—	1	7	0	1	7	0	1	10	$\frac{1}{2}$	1	11	0
		Horn	—	—	—	2	1	$\frac{1}{2}$	2	4	0	2	8	0	3	5	$\frac{1}{2}$
		Chap	—	—	—	1	9	$\frac{1}{4}$	1	8	0	1	9	$\frac{1}{2}$	1	9	0
		Cheek and Forehead	—	—	—	3	9	0	3	3	0	3	8	0	3	11	0
		Neck	—	—	—	3	7	0	2	9	0	3	4	0	3	6	0
		Chest	—	—	—	6	11	0	6	5	$\frac{1}{2}$	7	8	0	8	0	$\frac{1}{2}$
Round the	- - -	Knee	—	—	—	1	2	$\frac{1}{4}$	1	0	$\frac{1}{4}$	1	2	$\frac{1}{2}$	1	3	$\frac{3}{4}$
		Bone of Fore Leg	—	—	—	0	8	$\frac{1}{4}$	0	7	$\frac{1}{4}$	0	9	0	0	8	$\frac{3}{4}$
		Coronet of Fore Foot	—	—	—	1	2	0	1	1	$\frac{1}{8}$	1	2	0	1	3	$\frac{1}{2}$
		Hock	—	—	—	1	4	$\frac{1}{4}$	1	3	0	1	6	0	1	7	$\frac{1}{2}$
		Bone of Hind Leg	—	—	—	0	9	$\frac{1}{2}$	0	9	0	0	10	0	0	10	0
		Coronet of Hind Foot	—	—	—	0	11	0	1	0	$\frac{1}{2}$	1	0	0	1	0	0
Breadth of the	- - -	Horn	—	—	—	0	9	$\frac{1}{2}$	0	7	$\frac{3}{4}$	0	11	0	1	0	0
		Face across the Eyes	—	—	—	0	10	$\frac{1}{2}$	0	10	0	0	11	0	0	10	0
		Hips	—	—	—	2	0	0	1	11	0	2	1	$\frac{3}{4}$	2	6	0

The Models were executed from the above measurement, upon a scale of $2\frac{1}{4}$ inches to a foot.



Pub. by J. Gamard, London, 1801.

THE IMPROVED LONG HORNED or NEW LEICESTER BULL.



Pub. by G. Garrard, London. Nov. 1st 1800.

THE IMPROVED LONG HORNED or NEW LEICESTER COW.



Wm. H. Sharpe, London, 1857.

THE IMPROVED LONG HORNED or NEW LEICESTER OX.



London, Pub: March 1 1802, by George Garrard, Agricultural Museum, 28, George St. Hanover Sq.

A FAT LONG HORNED OX,

Bred & fattened at Dickley Farm in Leicestershire, by M^r. Honeybourn, Successor to the late celebrated M^r. Baker.

DIMENSIONS

OF

THREE BEAUTIFUL SPECIMENS OF THE STOCK AT WOBURN ABBEY,

Described in their respective Histories.

							HEREFORD OAKLEY BULL.			FAT DEVON HEIFER.			BANDY LONG-HORNED COW.		
							Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the - - - -	Hind Quarters	—	—	—	—	—	4	7	$\frac{1}{2}$	4	6	0	4	6	$\frac{1}{4}$
	Shoulder	—	—	—	—	—	4	8	0	4	5	0	4	4	0
	Knee	—	—	—	—	—	1	1	0	1	0	0	1	0	0
	Hock	—	—	—	—	—	1	8	0	1	8	0	1	6	$\frac{1}{2}$
From the Ground to the	Brisket	—	—	—	—	—	1	3	0	1	7	0	1	2	0
	Chest	—	—	—	—	—	1	8	$\frac{1}{2}$	1	10	0	1	4	0
Length of, or from the	Rump to the Extremity of Hip Bone	—	—	—	—	—	2	2	$\frac{1}{2}$	2	1	0	2	4	0
	Pole to the Tale	—	—	—	—	—	7	9	0	6	8	0	7	2	0
	Face	—	—	—	—	—	1	7	0	1	5	0	1	5	0
	Horn	—	—	—	—	—	1	5	0	0	10	0	1	7	0
	Chap	—	—	—	—	—	1	10	0	1	7	0	1	9	0
	Cheek and Forehead	—	—	—	—	—	4	4	0	3	4	$\frac{1}{2}$	3	6	0
	Neck	—	—	—	—	—	4	2	0	3	0	0	3	3	0
	Chest	—	—	—	—	—	7	9	$\frac{1}{2}$	7	2	0	7	6	0
	Knee	—	—	—	—	—	1	2	0	0	11	0	1	0	$\frac{1}{2}$
	Bone of Fore Leg	—	—	—	—	—	0	8	$\frac{1}{2}$	0	7	0	0	7	$\frac{1}{2}$
Round the - - - - -	Coronet of Fore Foot	—	—	—	—	—	1	2	0	0	10	$\frac{1}{2}$	1	2	0
	Hock	—	—	—	—	—	1	4	0	1	3	0	1	3	$\frac{1}{2}$
	Bone of Hind Leg	—	—	—	—	—	0	8	$\frac{1}{2}$	0	8	0	0	8	0
	Coronet of Hind Foot	—	—	—	—	—	1	2	$\frac{1}{2}$	0	11	$\frac{1}{2}$	1	1	$\frac{1}{2}$
	Horn	—	—	—	—	—	0	9	$\frac{1}{4}$	0	7	0	0	6	0
	Face across the Eyes	—	—	—	—	—	1	0	0	0	8	0	0	8	$\frac{1}{2}$
Breadth of the - - - -	Hips	—	—	—	—	—	2	2	0	2	2	0	2	1	$\frac{1}{2}$

The HEREFORD BULL was bred by the late DUKE of BEDFORD, and purchased for a small Price by the present Duke, when a Yearling, for his Stock at Oakley, in Bedfordshire, from which Circumstance he is known by the Name of the Oakley Bull—he is of Mr. TULLEY's Stock, near Hereford. The FAT DEVON HEIFER was a Favorite of the late Duke's, and was bred from Mr. PARSON's celebrated Devon Stock. The FAT LEICESTERSHIRE Cow, called Bandy, was Dam of the Ox given in this Work, and one of the Cows of Mr. PADGET's Stock.



To Shoulder.....^{ft in q}4 8 0
 Pde to Tail.....7 9 0
 Round Chest.....7 9 0

London, Pub: Nov^r 1st 1805. by J. Garrard 28. George St. Hanover Sq.

A BEAUTIFUL HEREFORDSHIRE BULL

Bred at Wobourn Abbey.

Crops Hips.....^{ft in q}2 2 0
 Brisket to Ground...1 3 0
 Bone fore Leg.....0 8 $\frac{1}{4}$



Dimensions
 Height of Hind 2nd 4.5
 Round Chest 7.2
 Pole to Tail 6.8

London Pub Nov. 1st 1805 by J. Garrard 28 George St. Hanover Sq.

A BEAUTIFUL FAT DEVON HEIFER

Which obtained a Prize at Smithfield 1802 Bred by the Late Duke of Bedford
 & Exhibited by His Grace the Present Duke of Bedford.

Weight
 Carcase 106.4
 Fat 19.4
 125.5



Pub^d by J. Garrard 28 George St. Hanover Sq. March 1st 1806.

A FAT LONG HORNED HEIFER.

Called Bandy from M^r. Padget's Stock Fed by the Late Duke of Bedford.

THE SUSSEX CATTLE.

THIS breed may be considered as one of the varieties of the native breed of the Island, being of the middle-horned class—colour mostly red, like the Devonshire cattle—but there are varieties amongst them, such as entire black; black and white, and red and white; some of which have proved good cattle: a black heifer obtained the prize at Lewes in 1798.

A Sussex Bull, of fine shape, is thus described: Head rather long, muzzle fine: Eyes prominent and lively: Ears thin: Horns fine, white, and projecting horizontally from the head, turning up a little at the points; the neck rising in a curve from the shoulder, and small where it unites with the head—Top of the shoulder joining full to the chine. Bosom and chest broad. Legs strait and fine. Broad loin, hips projecting, with round and springing ribs, quarters long and level from the rump to the hip, leaving but small space to the first rib. The tail round and thin, laying close between the wide rumps; colour a dark red—sometimes dappled with spots of lighter red, tending to yellow over the loins and rump; tip of the tail generally white. The true Cow, of good shape, has a red colour; fine hair; skin soft, mellow and thin; small head; fine horn, thin, clear, and transparent, projecting horizontally from the head, and turning up at the points. Neck very thin, and clean; small bones, strait top and bottom, with round and springing ribs, thick chine; loin, ribs, and rump wide; a fullness in the chest and twist, added to the properties required of a Dairy Cow, make a compleat character—but it is in Sussex as in most breeding countries, the dairy is become a secondary consideration.

The colour varies, like the cattle of Devonshire, from a light red, or even sandy, to a dark liver colour, with gold or flesh colour round the eyes and muzzle, the nose and horn seldom so near a light wax colour as the Devons, nor is the tip of the horn so commonly black, the whole horn being more

of a mixture of red and yellow, tending to black at the tips. The length, turn, and colour of the ox-horn will often be found to take a medium character between the Hereford and Devon, from which some idea may be formed that the breed partakes of a cross between those two; and however some individuals may resemble the best Devons so strongly as to make it difficult with the first judges to determine, yet it will be found that they have generally a larger frame than the Devons, and considerably more bone than either of those breeds.

The Sussex Oxen stand very high in reputation for purposes of labour; from which we may conclude, that a certain quantity of bone and high spirit being united may be no great objection to a working ox: but as feeding and the yoke should be united, the quantity of bone observed in many of the common sorts of Sussex cattle, added to some rough points is certainly not in their favour; but these faults are doing away very fast, since the attention paid by the Earl of Egremont to the improvement of the breed, and the consequent establishment of the Sussex Agricultural Society, from which the cattle of this County have obtained a respectable situation in all the exhibitions that have taken place, at Petworth, Lewes, Smithfield, &c. and Bulls have been purchased with a view of improving the breeds of cattle in various districts of the united Empire.

Amongst the most distinguished breeders of Sussex Cattle we find Mr. John Ellman of Glynde; Mr. H. Colgate of Bramfield; Mr. Gorringe of Westham; Mr. Carr of Bidingham; Mr. Cumings of Wartling; Mr. Vittle of East Farley in Kent (formerly Mr. Amherst's stock), from whom Mr. Kingsnorth of Kenardington in Kent purchased the famous Sussex Heifer, exhibited at Smithfield, and which obtained a Prize Christmas 1800, allowed in all respects to be the handsomest Fat Beast that had ever

trod

trod the pavement of that market. The dimensions, and a Print are given of this Beautiful Heifer, which weighed when slaughtered 106 Stone, 14lb. to the Stone. A correct Model of this animal upon the Scale of $2\frac{1}{4}$ inches to the foot, is placed in the Museum at Petworth, and in the collection at Wooburn Abbey, and also in the Agricultural Museum in London. The specimens of the Bull, Cow, and Ox, given in this work, were taken from the Earl of Egremont's stock, at Petworth.

DIMENSIONS OF THE SUSSEX CATTLE GIVEN IN THIS WORK.

							BULL.			COW.			OX.			FAT HEIFER.		
							Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the - - - - -	{	Hind Quarters	—	—	—	—	4	7	$\frac{1}{4}$	4	4	$\frac{1}{4}$	5	3	0	4	5	0
		Shoulder	—	—	—	—	4	8	0	4	3	$\frac{1}{2}$	5	3	0	4	4	0
		Knee	—	—	—	—	1	3	0	1	1	0	1	4	0	0	11	0
		Hock	—	—	—	—	1	10	0	1	9	0	1	10	0	1	6	0
From the Ground to the	{	Brisket	—	—	—	—	1	5	0	1	9	0	1	7	$\frac{1}{2}$	1	7	0
		Chest	—	—	—	—	2	0	$\frac{1}{2}$	1	10	0	1	11	0	1	8	0
Length of, or from the	{	Rump to the Extremity of Hip Bone	—	—	—	—	2	0	0	2	4	$\frac{1}{2}$	2	3	0	2	6	0
		Pole to the Tale	—	—	—	—	7	7	0	7	2	0	7	5	0	6	5	0
		Face	—	—	—	—	1	9	0	1	6	0	1	8	$\frac{1}{2}$	1	6	0
		Horn	—	—	—	—	1	2	0	1	4	0	1	6	0	1	1	0
		Chap	—	—	—	—	1	9	0	1	6	0	1	8	$\frac{1}{2}$	1	6	0
		Cheek and Forehead	—	—	—	—	3	11	0	3	4	0	3	7	$\frac{1}{2}$	3	6	0
		Neck	—	—	—	—	3	8	0	3	1	$\frac{1}{2}$	2	11	0	3	3	0
		Chest	—	—	—	—	7	2	0	6	5	$\frac{1}{2}$	7	5	0	7	7	0
Round the - - - - -	{	Knee	—	—	—	—	1	3	0	1	0	0	1	2	0	1	1	0
		Bone of Fore Leg	—	—	—	—	0	8	0	0	7	0	0	9	0	0	6	$\frac{1}{2}$
		Coronet of Fore Foot	—	—	—	—	1	2	$\frac{1}{2}$	1	1	0	1	5	0	1	0	0
		Hock	—	—	—	—	1	6	0	1	3	$\frac{1}{2}$	1	7	0	1	4	0
		Bone of Hind Leg	—	—	—	—	0	9	0	0	8	$\frac{1}{2}$	0	9	0	0	9	0
		Coronet of Hind Foot	—	—	—	—	0	11	$\frac{1}{2}$	1	0	0	1	3	0	0	11	0
		Horn	—	—	—	—	0	10	$\frac{1}{2}$	0	6	$\frac{3}{4}$	0	9	0	0	7	0
		Face across the Eyes	—	—	—	—	0	9	0	10	0	0	0	9	0	0	8	0
Breadth of the - - - - -	{	Hips	—	—	—	—	1	11	0	2	2	0	2	2	0	2	4	0



Drawn by G. Garrard. London. Jan. 1. 1808.
SUSSEX BULL
from the list of Egremont's Stock.



Engr. by G. Courtenay, London. Jan. 2. 1861

SUSSEX COW

from the Earl of Egremont's Stock



Pub by G. Gurnard, London, Jan. 1st 1801

SUSSEX OX

from the Earl of Egremont's Park



London, Pub: Nov: 20, 1802. by G. Garrard, Agricultural Museum, 2^d. George St. Hanover Sq.

Weight
 The four Quarters.....^{stone} 151, 10
 Head & Tongue.....4, 4
 Hide, Blood &c.....19, 8 ½
 Total.....186, 4 ½

THE BEAUTIFUL SUSSEX HEIFER,
 which obtained a Prize at Smithfield, Christmas, 1800.
 Bred by M^r. Vittle, East Farling, in Kent. &
 Fatted by M^r. Kingsnorth of Renardington in the same County.

Size
 Height of Quarters.....4, 5
 Round Chest.....7, 7
 Length from Pole to Tail 6, 4

THE HOLDERNESS CATTLE.

THE varieties of this breed have obtained the general appellation of the Short-Horned Breed of Cattle: they were originally brought from Holland by the Northumberland family, early in the last century, and have taken the name of Holderness, from a district in the East Riding of Yorkshire, where they were first established. We find the varieties of the breed now extended along the North-East Coast, from Norfolk to the borders of Scotland, being spread over Lincolnshire, the East and North-Ridings of Yorkshire, including the Bishopric of Durham, and great part of the County of Northumberland. Much attention has been paid to this stock on the banks of the Tees, particularly near Darlington; and a variety has been here produced, called the Tees-Water Cattle: they are very handsome, and fat to a prodigious weight. Mr. COLLINS, of Barnton, has been for many years the most distinguished breeder. His stock is chiefly red and white, back level, head and neck remarkably fine, carcase round, quarters long, hips and rumps even and wide, rather high on the leg, handle well, and have light bone in proportion to their size; to which is added, a fine coat and thin hide, peculiar to the short-horned breed.

From the quantity of milk which the short-horned cows produce, we find them the common stock of all the most populous districts in the kingdom. The cow-keepers about London are all supplied from the East and North-Ridings of Yorkshire, their average quantity of milk is eight or nine quarts at a meal: but some individuals have been known to give near double that quantity.

They are generally the highest of all the British cattle; and where attention has been paid to improve the shape, they have exceeded all others in weight also. But the common sorts are apt to be narrow across the loins and hips, thin in the fore parts, and twist, of course they cannot grow to any weight in proportion to their apparent size; many of them are large in the bone, heavy and inactive, consequently slow feeders, and by no means so well calculated to purposes of husbandry as the middle-horned breeds. Great advantage has been found by crossing with bulls of Devonshire and Sussex, by which a breed has been produced better calculated both for labour and for the markets. As it happens that those parts of the animal which give him the greatest power in the yoke, fetch the best price when slaugh-

tered; a broad loin, round barrel; and fine bone is the form adapted to all purposes; whereas an animal, however large, with narrow loins, flat sides, and heavy limbs, will be found scarcely equal to the operations necessary to support its existence, and after long feeding will return but small profit to the grazier.

In respect to colour, there are two distinct breeds, black and white, and red and white. There is also a variety without horns, called the Yorkshire Polled, of which the stock of HENRY PEIRCE, Esq. of Bedall, near Darlington, is in high estimation.

The bulls and cows of the Holderness breed are generally about five feet high on the hind quarters, the oxen from five feet six inches to six feet six inches, and sometimes higher.—The Tees-Water seldom exceed four feet six inches, oxen five feet to six feet.—The West-Riding of Yorkshire is principally stocked with the long-horned breed, of course mongrels are produced on the borders between the North and West-Ridings, which are approved by many, they are heavier than the long-horned, and are said to graze better than the short-horned breed; but in point of working very little is gained by this cross.

Cows of the short-horned, of good shapes, when fatted, weigh from 60 to 100 stone, and oxen to 140 and 160 stone, and sometimes heavier—an example of which is now exhibiting in London (January 1802) of the Tees-Water breed, of Mr. COLLINS's stock, and the property of Mr. JOHN DAY, of Harmston, near Lincoln, which is said to weigh 200 stone, an animal justly stiled the Wonderful Ox, no less distinguished for its uncommon beauty than for its weight, being an example of perfection in every way. We have given the dimensions and a print of this Ox. Short-Horned. Oxen of considerable weight have been killed at Howick in Northumberland, the seat of Sir HENRY GREY. There are some fine cattle of the Holderness breed upon Mr. WILLIAMS's estate at Great Marlow in Bucks, which came from Malton in the East Riding—a Cow of this stock, of uncommon beauty, was exhibited at Smithfield in 1797, weight when slaughtered 19 score 12 pound per quarter.

Sir

Sir JOSEPH BANKS, to whom the public is indebted for many improvements, has paid great attention to the true Holderness Breed of cattle, in Lincolnshire.

The specimens given in this work were taken from His Majesty's stock at Windsor; the dairy cows at Frogmore being all of the Holderness breed.

DIMENSIONS OF THE HOLDERNESS CATTLE GIVEN IN THIS WORK.

							BULL.			COW.			OX.			FAT OX.		
							Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the - - - - -	Hind Quarters	—	—	—	—	—	5	0	0	5	0	0	5	7	0	5	5	$\frac{1}{2}$
	Shoulder	—	—	—	—	—	5	0	0	4	11	0	5	6	0	5	5	0
	Knee	—	—	—	—	—	1	2	0	1	4	$\frac{1}{2}$	1	3	0	1	2	0
	Hock	—	—	—	—	—	1	10	$\frac{1}{2}$	1	11	0	2	0	0	1	11	0
From the Ground to the	Brisket	—	—	—	—	—	1	5	0	1	9	$\frac{1}{2}$	1	7	$\frac{1}{2}$	1	5	0
	Chest	—	—	—	—	—	2	0	0	2	2	0	2	3	0	1	9	0
Length of, or from the	Rump to the Extremity of Hip Bone	—	—	—	—	—	2	7	0	2	5	0	2	10	$\frac{1}{2}$	2	8	0
	Pole to the Tale	—	—	—	—	—	7	9	0	8	2	0	9	2	0	8	9	0
	Face	—	—	—	—	—	1	11	0	1	11	0	2	0	0	1	10	0
	Horn	—	—	—	—	—	1	1	$\frac{1}{2}$	1	1	0	1	6	0	1	8	$\frac{1}{2}$
	Chap	—	—	—	—	—	2	0	0	1	8	0	1	11	0	1	9	0
	Cheek and Forehead	—	—	—	—	—	4	4	0	3	6	0	4	6	0	3	8	0
	Neck	—	—	—	—	—	3	10	$\frac{1}{2}$	3	0	0	3	9	$\frac{1}{2}$	3	7	$\frac{1}{2}$
	Chest	—	—	—	—	—	7	7	$\frac{1}{2}$	7	3	0	8	2	$\frac{1}{2}$	10	1	0
	Knee	—	—	—	—	—	1	4	0	1	2	$\frac{1}{4}$	1	5	$\frac{1}{2}$	1	6	$\frac{1}{2}$
	Bone of Fore Leg	—	—	—	—	—	0	9	0	0	8	0	0	10	0	0	9	$\frac{1}{2}$
Round the - - - - -	Coronet of Fore Foot	—	—	—	—	—	1	4	$\frac{1}{2}$	1	3	0	1	5	$\frac{1}{2}$	1	5	0
	Hock	—	—	—	—	—	1	7	0	1	7	0	1	9	0	1	8	0
	Bone of Hind Leg	—	—	—	—	—	0	10	0	0	9	$\frac{1}{2}$	1	0	0	0	10	0
	Coronet of Hind Foot	—	—	—	—	—	1	3	$\frac{3}{4}$	1	2	0	1	4	0	1	3	0
	Horn	—	—	—	—	—	0	10	0	0	6	$\frac{1}{2}$	0	11	0	0	9	0
Breadth of the - - - - -	Face across the Eyes	—	—	—	—	—	0	10	$\frac{1}{2}$	0	8	0	0	11	0	0	11	0
	Hips	—	—	—	—	—	2	2	0	2	3	$\frac{1}{2}$	2	4	0	3	1	0*

* Girth over the Rib 10 ft. 10.—Over the Hips 10 ft. 3.—Round the Shoulder and Brisket 10 ft. 8.

The MODELS were executed from the above Measurements.



Publ: by G. Garrard, 28, George Street, Hanover Sq., London, Apr. 18. 1801.

HOLDERNESS BULL,
Taken from His Majesty's Stock at Windsor.



Pub. by G. Garrard, 23, George Street, Hanover Sq. London, Apr. 18. 1801.

HOLDERNESS COW,

Taken from His Majesty's Stock at Windsor.



Pub. by G. Garrard, 28, George Street, Hanover Sq. London, Apr. 18. 1801.

HOLDERNESS OX,

Taken from His Majesty's Stock at Windsor.

TEES WATER CATTLE.

SOME description of the Tees Water Cattle is already given in this Work, in the particulars of the Holderness, or short-horned breed of cattle, to which the celebrated fat ox, bred by Mr. COLLING, is attached; but, from the circumstance of those cattle having increased in celebrity, it has been thought right to give prints of the best bull and cow of the breed; and also a portrait of another wonderful ox, exceeding in size and weight, and majesty of figure, that already given, to which it is nearly related.

It is too difficult a task to attempt the early history or positive origin of this distinguished and truly valuable breed of cattle, which has been the ornament of the banks of the Tees for a great number of years: where there has been many judicious breeders, who have immediately succeeded each other; and, glowing with increasing emulation, they have brought the stock now to a pitch of excellence, that was never before known in any breed of British cattle, when the accumulated points of perfection are considered, whether as to beauty or profit. Such is pretty well demonstrated by referring to an extract of Mr. CHARLES COLLING'S Sale*; in which it appears, that 48 head of this highly cultivated stock, bred by himself, fetched £6,067. The shape is now brought to a high state of perfection. A straight back; springing ribs, broad and flat loins; (consequently the hip bones, though

broad, scarcely appear to project); a fine thin head; light neck, (not too long); deep in the brisket; broad in the chest; round barrel, with fine bone; and so gimp, or light in the belly, as, in some instances, to appear high on the hind legs. This is a very distinct point in the breed: a shape quite contrary to a hollow back and swagging belly, common in bad shaped animals. The hide possesses a certain mellowness that indicates the best quality. In respect to colour, there are many fine beasts of this breed that have been quite white. A celebrated Martin heifer, which is now travelling as a show, and which, as an example for fatness, was never excelled. Mr. NEASHAM'S celebrated ox is white: also Lily, bought by Mr. RUDD, as stated in the Catalogue. The external white of these cattle rises out of a golden pile next the skin, which gives a very rich and mellow appearance. The muzzle is uniformly flesh colour: any black, even a single spot, would throw suspicion upon the purity of the blood. The horn, which is small, is yellow, as are the hoofs†. The colour now most esteemed is the white and brown mixture; yet there are many very distinguished individuals of red, and red and white: black, as has been observed, is absolutely ill bred, whenever it appears. Some idea of the present breed of Tees Water Cattle is given by Mr. CHARGE, of Newton, near Darlington‡. Messrs. R. and C. COLLING were, for many years, the most distinguished breeders: but

* *A Catalogue of the improved Short-horned Cattle, belonging to Mr. CHARLES COLLING, of Ketton, near Darlington, in the County of Durham, which were Sold by Auction, by Mr. KINGSTON, of Stockton-upon-Tees, on Thursday and Friday, the 11th and 12th Days of October, 1810.*

FIRST DAY'S SALE.

COWS.		Bull'd by	Gs.
1	CHERRY, out of Old Cherry, by Favorite, 11 years old, dam of Peeress, (lot 3) Mayduke, (22) and Ketton, (30)—[Bought by J. Neasham, Esq. Haughton-le-Spring.]	Comet.	83
3	PEERESS, 5 years old, out of Cherry, by Favorite, dam of Cecil, (36)—[B. Rudd, Esq. Morton Lodge, Yorkshire.]		
4	COUNTRESS, 9 yrs. old, out of Lady, by Cupid; dam of Celina, (5); Cora, (12); Young Favorite, (31); Young Countess, (40)—[B. Rudd, Esq.]	Ditto.	400
5	CELINA, out of Countess, by Favorite, 5 years old.—[Sir H. Ibbotson, Bart. Denton Park, Yorkshire.]	Petrarch.	200
6	JOHANNA, out of Johanna, by Favorite, 4 years old.—[H. Witham, Esq. Cliffe Hall, Yorkshire.]	Ditto.	130
7	LADY, out of Old Phoenix, by a Grandson of Lord Bollingbroke, 14 years old, dam of Countess, (4); Laura, (8); Major, (21); and George, (32)—[C. Wright, Esq. Cleasby, Yorkshire.]	Comet.	206
8	LAURA, out of Lady, by Favorite, 4 years old, dam of Young Laura, (39); and Lucilla, (44)—[— Grant, Esq. Wyham, Lincolnshire.]		
9	CATHALENE, out of a daughter of the dam of Phoenix, by Washington, 8 years old, dam of Charlotte, (42)—[G. Parker, Esq. near Malton, Yorkshire.]	Ditto.	150
10	LILLY, out of Daisy, by Comet, 3 years old, dam of White-Rose, (46)—[B. Rudd, Esq.]		
11	DAISY, out of Old Daisy, by a grandson of Favorite, out of Venus, 6 years old, dam of Lilly, (10); and Sir Dimple, (33)—[R. Bower, Esq. Wellham, Yorkshire.]	Comet.	140
13	BEAUTY, out of Miss Washington, by Marske, a son of Favorite, 4 years old, dam of Albion, (35)—[C. Wright, Esq.]		
15	FLORA, 3 years old, by Comet, dam of Narcissus, (34)—[The Earl of Lonsdale.]	Comet.	70
17	MAGDALENE, 3 years old, by Comet, out of a Heifer by Washington, dam of Ossian, (28)—[— Champion, Esq. near Doncaster.]	Ditto.	170

BULLS.		Got by	
18	COMET, 6 years old, out of Phoenix.—[Wetherell, Trotter, Wright, and Charge, Esqrs. near Darlington.]	Favorite.	1000
21	MAJOR, 3 years old, out of Lady.—[— Grant, Esq.]	Comet.	200
22	MAYDUKE, 3 years old, out of Cherry.—[— Smithson, Esq.]	Ditto.	145
23	PETRARCH, 2 years old, out of Venus.—[B. Rudd, Esq.]	Ditto.	365
25	ALFRED, 1 year old, out of Venus.—[Mr. Thomas Robinson, Acklam, Yorkshire.]	Comet.	110
26	DUKE, 1 year old, out of Dutchess.—[Anthony Compton, Carham Hall, Northumberland.]	Ditto.	105
27	ALEXANDER, 1 year old, out of Cora.—[W. C. Fenton, Esq.]	Ditto.	63
28	OSSIAN, 1 year old, out of Magdalene, by Windsor.—[The Earl of Lonsdale.]	Favorite.	76
29	HAROLD, 1 year old, out of Red-Rose.—[J. Lambton Loraine, Esq. Kirk Harle, Northumberland.]	Windsor.	50

BULL CALVES.

	Got by	Gs.
31 YOUNG FAVORITE, out of Countess.—[— Skipworth, Esq. Aylesby, Lincolnshire.]	Ditto.	140
32 GEORGE, out of Lady.—[— Walker, Esq. Rotherham, Yorkshire.]	Ditto.	130
36 CECIL, out of Peeress.—[H. Strickland, Esq. Boynton, Yorkshire.]	Ditto.	170

HEIFERS.

	Bull'd by	
37 PHOEBE, 3 years old, by Comet, dam by Favorite.—[Sir H. Ibbotson, Bart.]	A son of Comet.	105
38 YOUNG DUTCHESS, 2 years old, by ditto, dam by Favorite.—[T. Bates, Esq. Halton Castle, Northumberland.]	Ditto.	183
39 YOUNG LAURA, 2 years old, by ditto, out of Laura.—[The Earl of Lonsdale.]	Ditto.	101
40 YOUNG COUNTRESS, 2 years old, by ditto, out of Countess.—[Sir H. Ibbotson, Bart.]	Ditto.	206

HEIFER CALVES.

	Got by	
45 CALISTA, out of Cora.—[Sir H. V. Tempest, Bart. Wynyard, Durham.]	Ditto.	106
48 COWSLIP.—[The Earl of Lonsdale.]	Comet.	25

† The white Wild Cattle of Chillingham Park have a pile much resembling the Tees Water, but they have uniformly black muzzles, hoofs, and the tips of the horns, which are long, compared with the Tees Water; consequently they cannot be related; the horn, denoting the kindred breed above all other circumstances; and on that account the Wild Cattle must be related to the native cattle of Wales, Scotland, and Ireland; the height, colour, and direction of the horns being similar. This declaration in Nature, the similarity of horn, gives all the short-horned tribes to the west coast of the continent of Europe, where that family is spread, in many varieties, through the west of France, Flanders, and Holland; rising gradually into fine bone, and high-bred qualities, as they leave Holland and approach the Island of Alderney, which is the neatest and most high-bred of all the short-horned tribes.

‡ From Mr. CHARGE to the AUTHOR.

Newton, 18th Feb. 1814.

DEAR SIR,

WHEN your letter, requesting some account of the short-horned breed of cattle arrived, I was from home, which prevented me returning an answer so soon as you might probably expect: and I fear you will be much disappointed by the information I am able to procure, as, upon inquiry, I find the paper, from which I made you some extracts, is not perfectly correct; neither does it detail that regular pedigree, which ought, if possible, to appear in your publication. I have called upon Messrs. ROBERT and CHARLES COLLING, and Mr. WRIGHT, of Cleasby, who are of opinion, that the account given of the origin of the improvement made in the breed in this district, by Messrs. CULLEY and BAILEY, in a *second edition* of the Agricultural Report of the County of Northumberland, which you will be able to procure in London, will afford you the most correct information on the subject; and likewise of all the individuals of the breed, fed to any remarkable degree of size or fatness, with their ages, weights, colours, &c.

I believe the short-horned cattle have been the prevailing breed of this part of the country time immemorial; but *more generally* attended to for their milking qualifications than their propensity to fatten: though, many years ago, some individuals, who I dare say are named by Messrs. CULLEY and BAILEY, introduced cattle of the same species from Holland, which I have been informed both improved and injured our native breed, according to the

Mr. CHARLES COLLING having disposed of his stock, Mr. R. COLLING remains the leading breeder: but the famous stock of his brother being dispersed, there are now many competitors. The four gentlemen, in particular, who bought the bull Comet, at 1000gs. Messrs. CHARGE, WETHERELL, WRIGHT, and TROTTER, in the vicinity of Darlington. Mr. WETHERELL's farming establishment, lately in the occupation, and, indeed, established by Mr. CULLEY, is such as not to be often met with, for the extensiveness of the arrangements, and the convenience for feeding and breeding of cattle, and carrying on every kind of farming business. He sends between thirty and forty 3 years old steers to market yearly, averaging from 80 to 100 stone, of 14lbs.; from £25 to £30 cash: such is the quick return of this stock. In other districts it is five or six years before the cattle are ready for market, if they are of any size. Some of the Tees Water are sent by the time they are two years and a half old.

This account must not be closed without noticing Mr. MASON, of Chitton, near Darlington, who has gained great celebrity in the production of many extraordinary individuals; no less distinct than those produced by Messrs. C.

merits and demerits of the bulls imported. Several gentlemen have, at various periods, been more eminent than the generality; yet none, I think, have shone more conspicuous, or been more successful, than Mr. CHARLES COLLING, late of Ketton; who, from a cow he purchased of Mr. JOHN MAYNARD, of Eryholme, near Darlington, crossed by his own bull, produced Old Phoenix, the dam of Favorite, and grand-dam of Comet, (a son of Favorite,) from which bulls the cattle of the country are now materially improved, in the symmetry of their form and propensity to fatten. As you have the Catalogue of Mr. C. COLLING's sale, it will show you what other cows were descended from Old Phoenix, who were the purchasers, and the prices; from which you can collect whatever best suits your purpose on that score. I shall not attempt to enumerate all the present breeders, as you are personally acquainted with most of them: but the white heifer, which has been exhibited in London, and all over England, for the last three years, will, no doubt, point out Mr. COLLING, of Barmpton, as one of the most celebrated at the present time. Mr. MASON, of Chilton, has, I understand, wrote an account of this breed, in a letter to Sir JOHN SINCLAIR, which is expected to appear in the next number of the *Farmers' Magazine*, printed for ARCHIBALD CONSTABLE and Co. Edinburgh; if not already inserted in the 57th No. that was to be published the 7th inst. but which I have not yet received. Should you want any further information, if it be in my power to afford it I shall have great pleasure.

* Since writing the above, this ox was shown at all the great towns, from Durham to London, in the months of October, November, and December, of 1813, and in London until the May following, and then proceeded to Rochester; where, by something unaccountable, fell ill, and languished for three weeks; and, when slaughtered, weighed 168 stone, sinking the offal.

† From Mr. CHAPLIN to the AUTHOR.

Tathwell, 8th March, 1814.

DEAR SIR, YOUR letter, from some neglect or other, did not come to my hands before yesterday. It would have given me pleasure if you could have made it convenient to have attended the Agricultural Meeting, that was held at Louth in 1812; more parti-

and R. COLLING. His fat cow, of 1808, of which there has been so many portraits distributed, had twelve inches of fat on the rump, and nine on the rib; and which, for fine bone and other qualities, has not been exceeded. But he stands now still higher as a breeder, by the production of the wonderful white ox, of Haughton-le-Spring, now travelling through the country as a show, and whose size and qualities strike every beholder with astonishment*. His portrait and dimensions are given in this Work; as also Comet, the celebrated Bull, mentioned in the Ketton sale: and likewise Juno, Mr. R. COLLING's favourite cow, esteemed the best of the year in the district; of a deep red colour. Bulls from this breed are now spreading through every county in England†, Ireland, and Scotland; and in a few years will, no doubt, be the leading stock of the country. Mr. BAKER, of Elsmere Hall, in the county of Durham, is rising into credit as a breeder of Tees Water Cattle, which are now establishing through the Border districts, and travelling to the pastures in the south; as their superior excellence becomes more and more known.

cularly as I had at that time a bull, and some other cattle, that I should have liked to have had likenesses taken of by you; and some of my neighbours felt an equal disposition to have some of theirs taken: but I must not take the credit to this county for their being the absolute produce of it: on the contrary, they were chiefly of the Durham breed; which, in fact, all the principal breeders in this country have crossed from. To speak the truth, the original breed of cattle in this county was a wretched bad animal; but, by this cross, is wonderfully improved: and, amongst those in this county that have had spirit to emulate, the improvement is as great as could be expected. It is now nearly forty years since the first Durham cattle were introduced into this neighbourhood, by a gentleman of the name of TURNHILL; who, from that time, has kept them distinct from any other sort; and I can safely say, in my tour round the county of Durham, a few years ago, I certainly did not see any cattle superior, if, in all respects, equal to them. Some larger I saw, but not any that possessed so many good qualities: their frames are more proportionable; with, in my opinion, a greater tendency to get fat. Of this breed, it is not uncommon to see oxen, little more than three years old, get very fat at grass alone, and weigh from 70 to 75 stone, 14lb. to the stone, each. These beasts are all of a dark red colour; and, if ever I have the pleasure of seeing you at this place, I can, without any trouble, show them to you, as a neighbour of mine in this parish has, by the death of Mr. TURNHILL, succeeded to them. The bull I mentioned to you I was desirous of having a picture of, I purchased on the edge of the county of Durham, in Yorkshire. He was descended from the best blood in the county of Durham, and was, most undoubtedly, a most extraordinary animal; but I was under the necessity of parting with him, on account of his turning out vicious. I have, however, several of his breed, that are superior animals, particularly cows and heifers. Amongst the most distinguished breeders of cattle in this county, I may enumerate Lord YARBOROUGH, Messrs. RICHARDSON, LOFT, CARTWRIGHT, BELL, OSTLER, GRANTS, ALLENBY, Mr. CHAPLIN, M. P. and several others that I am not particularly acquainted with; all of whom have, at a great expense, crossed from Mr. COLLING, or some other of the most famed breeders in the county of Durham.

P. S. The cattle you have in your Work, taken from the King's stock at Windsor, may very probably have come from this county, as I know Sir JOSEPH BANKS got some in this county for his Majesty, but they were the produce of a cross from the Durham cattle.

DIMENSIONS OF THE IMPROVED SHORT-HORNED CATTLE, GIVEN IN THIS WORK.

					BULL COMET.			COW JUNO.			WHITE OX.		
					Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the	-	-	-	-	4	11	$\frac{1}{2}$	4	9	$\frac{1}{2}$	5	5	0
					4	11	$\frac{3}{4}$	4	8	0	5	3	$\frac{1}{2}$
					1	5	0	1	3	0	1	3	0
					1	8	0	1	8	0	2	0	0
From the Ground to the	-	-	-	-	1	6	0	1	10	0	1	6	0
					2	1	0	2	0	0	1	7	$\frac{3}{4}$
Length of, or from the	-	-	-	-	2	2	$\frac{1}{2}$	2	2	0	3	2	0
					7	9	0	6	10	0	8	1	0
					1	8	0	1	6	0	1	9	0
					0	11	$\frac{1}{2}$	0	10	$\frac{1}{2}$	1	0	9
					1	11	0	1	8	$\frac{1}{4}$	2	0	4
					4	0	0	3	3	0	3	10	0
Round the	-	-	-	-	4	0	0	2	11	$\frac{1}{2}$	3	10	0
					7	4	$\frac{1}{2}$	6	10	0	10	5	0
					1	4	0	1	1	0	1	7	0
					0	8	$\frac{3}{4}$	0	6	$\frac{1}{2}$	0	9	0
					1	1	0	0	11	0	1	2	0
					1	7	0	1	4	0	1	9	0
					0	10	0	0	8	$\frac{1}{2}$	0	10	0
					1	2	0	1	0	0	1	3	0
					0	8	0	0	5	$\frac{1}{2}$	0	9	0
					0	10	$\frac{1}{2}$	0	7	$\frac{1}{2}$	0	9	$\frac{1}{2}$
Breadth of the	-	-	-	-	2	3	0	2	0	0	3	6	0



Published May 31. 1812. by G. Garrard 25 Old Bond Street London.

COMET.

A beautiful improved short-horned Bull purchased at Mr. Charles Collings sale for 1000 Guineas by Messrs. Wetheral, Charge, Wright and Trotter Esq. near Darlington, Oct. 12. 1810. It was got by Favourite. Dam by Favourite out of Favourite's dam 8 Years old.



JUNO.

A beautiful improved short horned Cow bred by Mr Robert Colling of Barmpton near Darlington 4 Years old.



A FAT TEESWATER OX
called
THE OX OF HOUGHTON LE SPRING.

An improved short horned of extraordinary size and Beauty bred and fattened by John Nesham Esq of that place near Durham -
it was got by M^r Masons Bull called Trunnell out of a Cow by Favourite Grass fed walks 200 stone of 14th and was in a thriving state when
this Picture was taken Nov^r 1812

To Shoulder . . . 5. 3 1/2
To Breast . . . 1 6
To Tail . . . 8 1
To Shoulder . . . 3. 10

Round Chest . . . 17 5
D^r Rib . . . 10 10
Cross Pins . . . 3 6
Thin Bone . . . 5 0

Engraved by J. G. Smith

THE SUFFOLK POLLED CATTLE.

THE following description of the breed is to be met with in the Annals of Agriculture, from the pen of Mr. Young.—The Cows of Suffolk have long been celebrated for quantity of milk, which exceeds, on an average, all other breeds in the Island, if quantity of food and size of the animal are taken into the account. The breed is universally polled, and small in size, few when fatted exceed 50 stone. The points admired, are a clean throat with little dew laps (which is not common in the breed;) a snake head; clean thin legs and short; a springing rib, and large carcase; a flat loin and hip bones square and even; the tail to rise high from the rump; but to the above most commonly found in those individuals famous for their quantity of milk, we must add a heavy belly; back bone ridged; chine thin and hollow; loin narrow; udder large, loose and crinkled when empty; milk veins remarkably large and rising in knotty puffs; a general habit of leanness; hip bones high and ill-covered, and scarce any part of the carcase, so formed and covered as to please an eye that is used to beasts of the finer breeds; but they have a property that contradicts their appearance, which is, that many of the Cows fatten remarkably well, and the flesh proves of a fine quality; in general the milk given is very considerable, eight gallons a day—six gallons is common from many for a large part of the season—five gallons is the average of a large dairy, which is a surprising quantity of milk from these small cows. When quantity of milk is very great, that of butter is rarely equal, three firkins is the usual produce for a good cow. The colour most prevailing is dun, pale yellow or lemon colour; but within these twenty years, red, and red and white, and pied, are not uncommon. The Cows and Bulls are nearly of the same height, about four feet two inches, to four feet six inches; the oxen four feet ten inches to five feet four inches; they are rough about the head, with large ears; but in general fine bones and thin hides.

The colour of the Bull and Cow given in this work, was of a light red and white, and the Ox of a yellowish dun. The Bull is from one in the possession of the EARL of EGREMONT, at Petworth. The Cow from an individual of the breed in Mr. WHITBREAD's dairy at Southill. The Ox was bred by Mr. BRETT, of Burnham in Norfolk, near Holkham; it shews that with attention, oxen of considerable weight might be produced from the breed; it also exhibits that much is yet to be done in the improvement of shape.

Sir THOMAS BEAUCHAMP PROCTER's steward, gives the following account of the Suffolk Cow Stock at Langley Park near Norwich.—The first calf a Suffolk Cow has, generally sucks for eight weeks; the Cow for the first month, if good, will give a gallon of milk per day, which is more than sufficient for the calf; the succeeding month the Calf will take the greater part; if the Cows calve about Christmas, they are chiefly fed on hay, the milk will then be of a better quality, but not so plentiful as when fed on turnips or grains. The average quantity of milk, per day, for the first twenty weeks after the calf is taken off, about four gallons; for the next ten weeks two gallons; after this time the Cow will give but little milk; the weight of such cows, when fatted, is about forty stone of 14lb. The price in Autumn about £20. a pair, and of the best out of the dairy £26. The breed is now spread over the greatest part of Norfolk, the adjoining County, to the extinction nearly of its own native breed, which was a similar kind of stock, but all of them with upright horns, their colour deep red or brindled, with white in the face, and dew laps.*

* The description of the best milkers in Cheshire agrees so well with the Suffolk, an extract from the Agricultural Reports of Cheshire by THO. WEDGE, Esq. may, perhaps, with some propriety, be given in this place.—There is no species of Cattle which is peculiar to this County, and that being the case, the nature of the breed is scarcely to be described; the long-horned Lancashire, the Yorkshire short-horned or Holderness; the Derbyshire; the Shropshire, the Staffordshire, the Welsh, Scotch, Irish, some new Leicestershire Cattle, have at different times been introduced in different parts of the County, and the present stock of dairy-cows is a mixture of all these. It is impossible to say which of the intermixed breeds are the most approved of, as milkers. To describe the variety of opinions on this head, would be almost an endless task: there are some persons that prefer half-bred cattle from the Lancashire and the present Cheshire; others prefer a breed between the Cheshire and Lancashire, or between Cheshire and Welsh. On the best land the Holderness and Lancashire are most prevalent; on the inferior lands a short-leg sort mixture of Welch is preferred; the size, form, and

production of the udder is more attended to than the carcase of the beast; and it seems to be universally allowed, that there is very little if any connexion between utility for the dairy, and the much admired point so desirable to the breeder, who is rearing stock for the butcher; it is generally admitted that such cows as we breed upon the land answer best as milkers. If a cow is brought from poor land, it is not till the second year that she comes to her full milk; an old cow may give more milk than a young one, but it is not of so good a quality; the period for milk is from the 4th to the 10th year. The points which are generally thought to indicate a good milker we believe are as follow: a large thin skin'd udder; large milk veins, shallow and light fore quarters, wide loins and thin thigh, and white horn, a long thin head, a brisk and lively eye, fine and thin about the chap and throat, and notwithstanding, some of these points will be allowed in feeding-cattle, yet upon the whole, a good milker is generally ill shaped; it is found however, by experience, that those cows which have an aptitude to fatten, very seldom, if ever are profitable milkers.

DIMENSIONS

OF THE

SUFFOLK POLLED CATTLE.

							BULL.			COW.			OX.		
							Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the - - - -	Hind Quarters	—	—	—	—	—	4	6	0	4	0	0	5	8	$\frac{1}{2}$
	Shoulder	—	—	—	—	—	4	7	0	3	11	$\frac{1}{2}$	5	8	0
	Knee	—	—	—	—	—	1	2	0	1	1	0	1	4	$\frac{1}{4}$
	Hock	—	—	—	—	—	1	8	0	1	5	0	1	11	0
From the Ground to the	Brisket	—	—	—	—	—	1	4	$\frac{3}{4}$	1	4	$\frac{1}{2}$	1	6	0
	Chest	—	—	—	—	—	1	9	$\frac{1}{2}$	1	7	0	2	0	0
Length of, or from the	Rump to the Extremity of Hip Bone	—	—	—	—	—	2	0	$\frac{1}{2}$	1	9	$\frac{1}{2}$	2	3	0
	Pole to the Tale	—	—	—	—	—	7	0	0	6	9	0	9	0	0
	Face	—	—	—	—	—	1	8	0	1	6	0	2	0	0
	Chap	—	—	—	—	—	1	10	0	1	7	0	1	10	0
Round the - - - -	Cheek and Forehead	—	—	—	—	—	4	0	0	3	4	0	3	11	0
	Neck	—	—	—	—	—	3	9	0	2	9	0	4	0	0
	Chest	—	—	—	—	—	6	11	$\frac{1}{2}$	5	1	0	8	5	0
	Knee	—	—	—	—	—	1	1	0	0	11	0	1	4	0
	Bone of Fore Leg	—	—	—	—	—	0	8	0	0	7	$\frac{1}{2}$	0	9	0
	Coronet of Fore Foot	—	—	—	—	—	1	1	0	1	1	$\frac{1}{2}$	1	3	$\frac{1}{4}$
	Hock	—	—	—	—	—	1	4	0	1	3	$\frac{3}{4}$	1	10	$\frac{1}{2}$
	Bone of Hind Leg	—	—	—	—	—	0	8	0	0	8	0	0	10	$\frac{1}{2}$
	Coronet of Hind Foot	—	—	—	—	—	1	1	0	0	11	$\frac{1}{2}$	1	2	$\frac{1}{2}$
	Face across the Eyes	—	—	—	—	—	0	10	$\frac{1}{2}$	0	10	0	0	9	$\frac{1}{2}$
Breadth of the - - - -	Hips	—	—	—	—	—	1	7	0	1	11	0	2	6	0



London Pub. Nov. 1st 1805 by G. Garrard 28 George St. Hanover Sq.

A SUFFOLK BULL

In the Possession of the Earl of Egremont.



Pub. March 1. 1862. by George Fawcett, Agricultural Museum, 28 George St. Manchester Eng.

A SUFFOLK COW,

In the Possession of Samuel Whittbread Esq.



Size
 From Pole to Tail - 9 -
 Crop Hips - 2 - 6
 Height of Shoulder - 5 - 6
 Round Chest - 8 - 5

London Pub. Nov^r 1st 1825 by J. Garrard 28 George St. Hanover Sq.
 A SUFFOLK OX
 Bred by M^r Brett of Burnham near Holkham Norfolk

Weight
 Fore Quarters - 93 - 6
 Hind 2nd - 85 - 2
 Hide Blood &c - 92 - 6
 Total - 271 - 6

SCOTCH CATTLE

MAY be divided into four distinct kinds, of which there are many variations.—The *Native, or Western Highland*, common in the Hebries, the Isle of Sky, Mull, &c.—The *Galloway*, which is polled—The *Fife or Angus* polled; and the *Aberdeenshire*, the largest of the Scotch Cattle. There are also many varieties of Cattle that are not natives; the most distinct of which, is the Dunlop or Dairy Breed of Cattle, which are particularly described in several reports.—The Dutch Breed has also been introduced as well as the Long Horned and the Hereford's.—The most genuine and perhaps the purest breed, are those of the West Highlands, of which we have given prints of a Bull and Cow, sent by the Marquis of Huntley from Traspay, as a present to the Dutchess of Bedford, and which are now at the Dairy Farm at Woburn Abbey, and also, a print of a beautiful Highland Ox, fed by Mr. Joiner, which obtained a prize at the Smithfield Shew of 1805. In the first efforts of improvement, much mischief was done by bad crosses, but in Traspay, and in the Highland Country, as well as in the Hebrides, the Breed remained unmixed, and preserved their native handsome form; but from the coarseness and scantiness of the pasture, their size was comparatively small; and since the introduction of sown grasses and turnips, they are much mended, and are allowed to be amongst the best shaped Cattle in the Island.* The Black Highland Fat Ox, the print of which is given, was fed by the late Sir H. Vane Tempest, and was exhibited at the Smithfield Shew, Christmas 1809, and was then set at 90 stone: it was taken back to Vineyard, the Seat of the Hon. Baronet; and not recovering the fatigue of the journey, and having sunk considerably, was some time after slaughtered. The four quarters weighed upwards of 80 stone.

ARGYLESHIRE CATTLE (forming part of the West Highland Stock) are a small hardy breed, generally weighing when fat, from 20 to 24 stone the four quarters: few of them are polled, but the horn is generally small. Gentlemen who have paid attention to Breeding and Rearing, have of late greatly improved both the shape and size of their Cattle: they give sometimes from 30 to 50 guineas for a Bull, and from 20 to 25 guineas for a handsome breeding Cow: amongst the ordinary tenants however this improvement goes on but slowly: their farms are generally over-stocked, so that Cattle of all ages are stinted in their feed, and are thus kept low in size. The Cattle of Kentire, are not so good as the rest in the Country, but they give more milk: three years old, fetched from £6 to £7. in 1796; and some as high as £10 or £12. Mr. Bakewell pronounced the West Highlands or Argyleshire Stotts, as amongst the best Cattle of the Island: to improve the breed, they got Bulls, formerly from the Isle of Sky, but now they find it best to keep to the handsomest individuals of their own stock, which is much larger. Some have crossed with the Galloway, but even this is not allowed to be so good as keeping the blood pure to the Argyle, as the genuine breed is always preferred by the drovers, the graziers finding that a cross-breed animal is not generally so good a feeder.†—The best form of the Argyle Cattle is short legged, round body, strait back, and long in the muzzle: they are of various colours, black, dun, brindled, and brown; but the black is the most common. See the *Agricultural Reports of Scotland*.

* It is well known from the manner in which cattle were treated in Scotland (as well as in other Countries) before the present breeding system commenced, that the Stock in general must have been of a poor contemptable quality [see Annals, vol. 42, p. 272]. Altho' the Counties of Galloway and Ayrshire send 30,000 Cattle to England annually, not one third can be called Galloways, as for miles square there is scarcely a beast to be found that has not a dash of some other mixture; and to find out the true Galloway, we are obliged to search the wild Moors of Moncreif and Glentire, this was owing to a false system in breeding, when the object of improving the stock first commenced, instead of taking measures to retrieve the true native blood and figure of the stock, they unfortunately introduced the Dutch and Lancashire breeds, which being crossed with each other, and the native cattle, produced a mixed clumsy and unthrifty sort, but this was soon discovered, and care has of late been taken to recover the true Scotch breed, by the purchase of Bulls from the Isle of Sky and the Ayrshire coast, &c.

† The best breeds in Argyleshire, are in the districts of Argyle, Lorn, and the Isles of Columba and Mull. The Duke of Argyle; Mr. Campbell of Kilmarton; Mr. Campbell of Shawfield; Mr. Maxwell of Oransa; Mr. Campbell of Dynants; and Mr. M'Dougal of Ardinthaive, have the most distinguished breeds.

ABERDEENSHIRE STOTTS.—The Aberdeenshire Cattle are highly esteemed by the English Graziers who fatten for Smithfield market, insomuch, that individuals have sometimes been considered as the best that has been sent from Scotland to England, they are esteemed the largest of the Native Scotch Cattle. Great competition is kept up in the neighbouring county of Angus. At the great Aiken Fair at Old Deer, Stotts some years since, sold as high as 25 guineas each. There is also a large breed in the county, crossed most likely with the short horned; common weight four quarters only from 115 to 120 stone of 14lb. when full aged, 6, 8, or 11: but the Native Stott comes much earlier to market; and there is an instance of their weight at 3½ years, 88 stone. Upon an experiment, several individual beasts have doubled their weight in 16 months, it is found not to succeed for profit to keep the stock longer in feeding.

Two Stotts bought in June 1809 for £15. sold in May following for £32. weighed 295lbs. and when fat 591lbs. The number of Cows kept in Aberdeenshire is estimated at 20,000: the product of the dairy is taken at £230,000; the whole head of Cattle is taken at about 110,000, and valued at 720,000: the live stock kept, and the sales amount to nearly a million, or at least 970,000. This account of black Cattle in one county, shews the vast interest which the whole stock of the Nation must have in the prosperity of the public at large.*

THE GALLOWAY COW so well known and highly esteemed in the English market, was till of late, the only breed known in Catrick, and in former ages throughout the whole county of Ayr; the dairy breed has been lately introduced, and is fast increasing in Carrick; still the Galloway Cow is most common in the district of Ayrshire. It is well known that the Galloway breed of Cattle, whether from the Counties of Wigton or Ayr,† or Stewartry of Kirkcudbright, have by the attention of the inhabitants, been brought to a degree of perfection equal, or superior, to any breed in Great Britain: they are of tolerable size, and very handsome; spirited, strong, very healthy, and hardy; and no Cattle whatever feed better, or yield beef that is more relished at table, as can be well attested in all parts of South Britain. This superior breed has not been improved from a foreign origin, nor by crossing with Bulls from other quarters: it is the entire Breed of Galloway and Ayrshire, brought to perfection in the way before stated, by the good management of the inhabitants of the County. Their shape is a short and round head, narrow at the muzzle, and without horns; the eye quick and lively; the neck rather bending upwards; small near the head; shorter than those of the dairy breed; but not so long as that of the Irish; if its neck is too long, the Cow is generally a bad feeder; the body strait and

* With respect to the form of Black Cattle, Dr. Coventry, Professor of Agriculture, has quoted a paragraph from Mr. Cline, which deserves the attention of every breeder.—“A compact round body, a deep chest, a broad loin, full limbs, bones not coarse, and a soft, but not thick skin, with hair not stairing too hard, are amongst the chief marks of a good kind.”—The short legged animals too are generally preferred to those of an opposite description, they being found to be least hardy, and the most difficult to rear or fatten; the most hardy has always the best constitution, and the rules above quoted, are tests of this, as well as of the form of the animal. The colours which are considered as good, are brown, black, brindled, and dun, if not too white; the weight will pretty well explain their size, averaging 36 st. to 40: extra stock will double that weight.

† As the County of Ayr formed a part of the Kingdom of Galloway, and was inhabited by the same people (Cambrian Britons) their Cattle, and the mode of treatment would continue the same in both Counties, so long as the Inhabitants remained uncivilized, except in so far as they were affected by soil or climate; but the Inhabitants of both Countries seem to have begun much earlier than their neighbours, to pay attention to Cattle and their products. It is impossible now to discover by whom or at what period, improvements in Cattle were first introduced; there being an old adage so extremely remote, that its antiquity cannot be traced, shewing that Cattle and their produces had been early attended to, in Ayrshire and Galloway.

The prices of a Galloway valued of late years from 10 to 18 guineas, according to the excellence of the breed, its age and size, and state of the market, probably the following are nearly the general prices of the County:

One year old from	£3 to £5	Three ditto.....	£10 to £16
Two ditto	6 to 10	Four ditto.....	13 to 19

round, that the lungs may have room to grow, the back strait from the ear to the rump; broad and level over the kidneys, and no rise at the root of the tail; ribs broad; chest round; belly of a moderate size, and pelvis large; flank full and broad at the head of the loin, in the rumps and hams full and fleshy; legs short and strait at the hind knee joint; tail thick, short and bushy with hair; hair long and shaggy; colour brindled, black or dun.

THE DUNLOP BREED OR AYRSHIRE DAIRY COW; is now beginning to be known in other parts of Britain, and is justly famed wherever it is introduced; and is, undoubtedly, the most improved breed of Cattle to be found in the Island, not only for the dairy, in which they have no parrallel, under similar soils, climate, and relative circumstances, but also for feeding for the shambles; they are in fact a breed of cows that has, by crossing, coupling, feeling, and treatment, been improved, and brought to a state of perfection, which sets them above all others yet known, to answer in almost every diversity of situations, where grain and grasses can be raised to feed them, for the purposes of the dairy, or for fattening them for beef; which has been effected by the good management of the people of Cunningham. It is said this breed was introduced by the Earl of Marchmont 1750, purchased of the Bishop of Durham, which gives them some claim to a close kindred with the Tees Water Cattle, to which they bear a great resemblance;* till those Cattle were introduced, the Cows of Cunningham, were generally black with some white in their faces, belly, back, or tail. The native breed of Cows in Scotland seems to have been generally black, they are still mostly of a dark or black colour, hence the term black Cattle is applied to Cows of every colour; but now the dairy breed of Ayrshire is of a brown and white colour, and completely distinct from the native

breed, in all respects.—This celebrated breed of Cows is not confined to Cunningham: they are spreading in every direction; their celebrity have reached Caithness and Kent, and almost every County between them. A large herd of them were sent a few years since from Fife Castle to Lord Gwydir, at Grimsthorpe Castle, the Seat of the late Duke of Ancaster. The examples of the Bull and Cow given in this work were taken at Grimsthorpe: their shape is as follows: head small, but rather long and narrow at the muzzle; the eye small and bright; the horn short and crooked; neck long and slender, tapering towards the head, with no loose skin below; shoulders thin, fore-quarters light, hind-quarters large; back straight and broad behind the points, and rather loose and open; carcase deep, and pelvis capacious; wide over the hips, with round fleshy buttocks; tail long and small; legs small and short, with firm joints; udder large stretching forwards, neither fleshy, low hanging or loose. The milk veins large and prominent; teats short; all pointing outwards, and at considerable distance from each other; skin thin and loose; hair soft and woolly; the head, bones, horns, and all parts of least value, small, and the general figure compact, and well proportioned; the docility of their temper greatly enhances the value of the stock; to which are added, their product, in the season 14 Scotch pints 28 qrs. though 10 Scotch pints is the general quantity. Another quality of these Cows, is, that after their having yielded a quantity of milk for a number of years, they are as valuable for Beef as the Galloway or any other breed of Cows in Scotland, and they fatten as quick. See *Mr. Aiton's Reports of Ayrshire, &c.*

* These cattle are undoubtedly a variety of the short horned class, and have no claim to be considered as a native Scotch breed, any more than the Dutch, the Lancashire, or any beast that may have been imported into the Country.

Dimensions of SCOTCH CATTLE.			HIGHLAND BULL.			HIGHLAND COW.			HIGHLAND OX.			HIGHLAND FAT OX.			DUNLOP BULL.			DUNLOP COW.		
			Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the	{	Hind Quarters.....	3	10	0	3	6	0	4	3	0	3	8	0	4	3	$\frac{1}{2}$	4	2	0
		Shoulder.....	3	8	0	3	5	0	4	3	0	3	7	$\frac{1}{2}$	4	2	$\frac{1}{2}$	4	0	0
		Knee.....	1	0	0	0	10	0	1	0	0	1	1	8	1	2	0	1	1	0
		Hock.....	1	5	0	1	1	0	1	3	0	1	4	0	1	6	0	1	5	$\frac{1}{2}$
From the Ground to the	{	Brisket.....	1	2	0	1	1	0	1	4	0	1	5	$\frac{1}{2}$	1	2	0	1	4	0
		Chest.....	1	4	0	1	4	0	1	6	0	1	6	0	1	6	0	1	5	0
Length of, or from the ..	{	Rump to Extremity of Hip Bone	1	11	0	1	6	6	1	11	0	2	4	0	2	1	0	1	10	0
		Pole to the Tail..	6	9	0	5	7	0	5	7	$\frac{1}{2}$	7	2	0	7	1	0	6	4	0
		Face.....	1	4	0	1	2	0	1	10	0	1	5	$\frac{1}{2}$	1	7	$\frac{1}{2}$	1	5	0
		Horn.....	1	1	0	1	4	0	1	8	0	1	2	0	0	6	$\frac{1}{2}$	0	9	0
Round the...	{	Chap.....	1	6	$\frac{1}{2}$	1	4	0	1	9	0	1	10	0	1	5	0	1	5	0
		Cheek and Forehead.....	3	6	0	3	0	0	3	8	0	4	1	0	3	5	0	2	3	0
		Neck.....	3	3	0	2	7	0	3	2	0	4	2	0	3	7	0	2	8	0
		Chest.....	6	3	0	5	5	0	6	5	0	7	9	$\frac{1}{2}$	6	8	0	5	9	0
		Knee.....	1	1	0	0	10	0	1	0	9	1	4	0	0	11	0	0	10	$\frac{1}{2}$
		Bone of Fore Leg.....	0	7	$\frac{1}{2}$	0	6	0	0	7	$\frac{1}{2}$	0	8	$\frac{1}{2}$	0	7	$\frac{1}{2}$	0	6	$\frac{1}{2}$
		Coronet of Fore Foot.....	0	11	0	0	10	0	1	1	0	1	2	0	0	11	0	0	9	0
		Hock.....	1	2	0	1	1	0	1	3	6	1	4	$\frac{1}{2}$	1	1	0	1	0	$\frac{1}{2}$
		Bone of Hind Leg.....	0	7	$\frac{1}{2}$	0	7	0	0	8	0	0	9	0	0	8	$\frac{1}{2}$	0	7	$\frac{1}{2}$
		Coronet of Hind Foot.....	0	11	0	0	10	$\frac{1}{2}$	1	1	0	1	3	0	0	11	0	0	10	0
		Horn.....	0	8	$\frac{1}{2}$	0	7	0	0	8	0	0	9	0	0	5	$\frac{1}{2}$	0	4	$\frac{1}{2}$
		Face across the Eyes.....	1	0	0	0	8	0	0	11	0	0	11	0	0	8	$\frac{1}{2}$	0	7	$\frac{1}{2}$
Breadth of the	{	Hips.....	1	7	0	1	6	0	1	8	0	2	6	$\frac{1}{2}$	1	8	0	1	6	0



London Published by G. Garrard, Jan^y 1. 1810, N^o. 4. Queen's Buildings, Knightstridge.

HIGHLAND BULL.

From the Stock at Woburn Abbey.



London Published by G. Garrard Jan^r 1, 1810. N^o 4. Queens Buildings, Knightsbridge.

HIGHLAND COW

From the Stock at Woburn Abbey



A FAT HIGHLAND OX.

Fed by Sir Henry Vane Tempest of Lampton Hall - weight 90 Stone 14 lb.

Published May 31. 1815. by G. Gurnard 23 Old Bond Street London.



Pub.^d by G. Garrard, 28, George St. Hanover Sq. March 1st 1806.

A FAT HIGHLAND SCOTCH OX.

Which Obtained a Prize at Smithfield Xmas 1805. Fed by M^r. Joiner.



Published May 31. 1813, by G. Garrard 23 Old Bond Street London.

ADUNLOP BULL.

Common in Ayrshire in Scotland of Lord Gundred's stock at Grimthorpe.



Published May 21. 1813 by G. Garrard 23 Old Bond Street London.

ADUNLOP COW.

Common in Ayrshire in Scotland. of Lord Gwyders stock at Grimthorpe.

WELCH, IRISH, AND SHETLAND CATTLE.

THE PEMBROKESHIRE, OR CATTLE OF SOUTH WALES.

THE Ox is by far the most valuable stock the farmers of Pembrokeshire possess. They are coal black, except now and then a dark brown or white face, or a white list, makes its appearance along the back. Of late years much attention has been paid to the improvement of this stock. By rearing bulls from their best shaped cows, the demand for bulls of this breed is daily increasing. The cow is fine boned, with a clean light head and neck, small yellow horn, inclining upwards; good chine and loin; long round barrel, thin thigh, and short fine legs; always in good condition if tolerably kept; and has a rich wave in her hair, and an oiliness of skin, which ever denotes thriftiness of kind. This sort of cow is to be met with in the country, where tolerable care is taken in the choice of bulls. Weight, when full beef fat, average about 36st. 14lb. There is not perhaps in England a breed of cattle more profitable to the grazier, or that proves better in the scales of the butcher. All the drovers, English and Welch, agree, that the true Pembroke ox is the favourite beast with the grazier. The oxen get rid of their steery figure sooner than those of other countries. When turned of three they have an ox-like appearance; and, if well kept, they will grow beef fat in the fourth year. The black ox bears his journey well, and will improve in his flesh as much in three months as some will in five. The average weight of a five years old is from 50 to 56st. 14lb. Sometimes they will fat to 80st. In respect to milk, 7lb. of butter is made through the dairy season, from the middle of May to the middle of October; but this is only on the best pastures: 5lb. is a fairer average. The milk might be increased, perhaps, but great care should be taken not to obtain it by a sluggish mixture. A cross with the long horned has been found to be productive of no good. Some recommend the Hereford, and others the Suffolk polled; but surely, with a little attention, the object might be better effected by selections in the native stocks. The oxen are generally used with horses in the team: they yoke two oxen in a wain or cart, drawn by a pole, which is fixed by a ring pendent from the centre of the yoke, with two horses abreast as leaders. The expedition these teams use in conveying coals to the ships on the Pembroke shores, which must always be done in one tide, never fails to strike, with equal wonder and compassion, a bystander, not used to such rapid driving as is always exhibited on these occasions. In short distances, and for all work to be done upon a farm, the ox is certainly an useful and profitable servant: he is maintained at less than half the expense of the horse; and, when his labour is no longer required, he pays his owner double the original cost. This may be said of the active breeds of cattle. The Pembroke steer, which costs from four to five pounds, at 2 and $\frac{1}{2}$ old, begins his labour the ensuing spring, and will commonly sell for £10, or guineas; or £11, if tolerably well kept. The cow stock of Cardigan depend chiefly upon the Pembrokes, which extend over all the surrounding counties, in various degrees*, and form the principal stock of South Wales.

THE CATTLE OF NORTH WALES.

THE cattle of North Wales we find described in Mr. DAVIS's Reports of the counties of Anglesea, Flint, Caernarvon, Merionydd, Denbigh, and Montgomery†.

The staple exports of Anglesea are copper and live stock. Roberts, in his *Mass of Commerce*, published about the year 1649, says, that the island sent then to the English market 3000 head of cattle annually; and it is said now to exceed 8000, from the age of one to four, which, in 1797, may have been sold at or near the following prices:

900 yearlings, mostly heifers, sold at £4 10s. each	=£4,050
2000 two years old..... 8 8.....	= 16,800
5000 three ditto 11 0.....	= 55,000
Making an aggregate of.. £75,850	

In 1811, when cattle were at a very high price, they would have fetched £20,000 more.

When numerous herds are bought in the island for the English markets, they are compelled to swim in droves across the strait of the Menai; and although numbers of the weaker sort are sometimes swept down by the force of current for some miles, yet losses seldom happen.

Wherever the rearing of cattle is the chief object of the farmer, the articles of the dairy are of course neglected. Calves are not weaned in Anglesea until they are double the age common in other countries.

The characteristics of a choice Anglesea runt, agree in most points with those of a Roman ox, as described by COLUMMA. Cold black colour, remarkable broad ribs, high and wide hips, deep chest, large dulap flat face, and long horns turning upwards. Mr. BAKEWELL thought that, in some points, they were nearer his idea of perfection than any other he ever saw. The average weight of their quarters when fat, at three or four years old, is from 8 to 11 score. One farmer, having worked 25 oxen, kept some of them until they were eight or nine years old; and, when fat, they usually weighed from 13 to 15 score per quarter, and fetched from £20 to £25 per head in 1797.

Some of the first breeders think the high and wide hips are distinguishing marks of this breed.

The promontory of Lleyn and Everuydd, in Caernarvonshire, having the same kind of undulated surface, though not altogether so good a soil as Anglesea, has likewise a breed of cattle similar in several of their characteristics, and supplies England with about 6000 head yearly.

The cattle in the remaining part of Caernarvonshire, and in the whole of the county of Meyrionydd, some few select stocks excepted, seem to be diminutives of the above breed of Anglesea: those of Lleyn and Everuydd having nothing to recommend them but their extreme hardness, and consequent cheapness of rearing.

The high lands of the counties of Denby and Montgomery abound with the same puny race. In the vales, and in the county of Flint, the cattle are of a superior kind, larger, and of all varieties of colours. The natives of the sea coast, from Abergelan to Holywell, and thence along the Dee towards Cheshire, are reckoned very quick feeders. As an instance of it, a gentleman from that quarter, in 1784, having worked his oxen until he had finished turnip sowing in June, sold a pair of them to a neighbouring grazier at £25, the market price. Without the aid of any other luxury than rest from labour, and plenty of grass, these cattle were so increased in bulk by December following, as to have their beef sold for upwards of double the prime cost. Another pair of oxen, reared on Bodtryden Farm, in the same neighbourhood, were worked until the end of the sowing season, in October. These fed with grass, cabbage, turnips, and mixed meal of peas, beans, and oats, and sold the following March for 62 guineas; the best weighing a ton.

* The foregoing description is chiefly taken from JENNINGS' Annals.

† Live Stock, chap. xii. page 510.

A grazier, of good judgment and experience, prefers the Montgomeryshire cattle from the vales of the Severn, to any other breed in Wales. According to his opinion they collect bulk on the valuable parts, and have less offal than those of Shropshire. About nine months' feeding on grass, hay, and turnips, will add about three score pound weight to each of their quarters. Cow beef, when fat, will weigh from seven to ten score the quarter. The real breed of the county are the brindled, finchback, and short-legged kind. Another kind has of late become very numerous in the Severn Vale,—the long-legged light brown colour, without any mixture, and smoky or dun faces, said to have come originally from Devonshire. They do not seem superior in any particular to the original Montgomeryshire breed, except that long-legged oxen are better adapted to the chains*.

NATIVE IRISH, OR KERRY CATTLE.

THAT wild track of mountains between Gilly Kuddy Rocks, near Kilarney and Bantry Bay, is said to be the only place in Ireland where the native Irish cow is to be had. These cattle being reared in a country of rocks and heath, are of course very hardy, and live upon little food. Their properties are said to be that of giving the richest quality of milk, and the greatest quantity, for the sustenance they require. For the size of the animal the Norman or Alderney may yield more, but they are affected more by the severity of winter.

The cow, from which the Print in this Work was taken, was brought, in 1803, from Bantry Bay, from the estate of Mr. HERBERT, of Hewness, with nine others, and a bull, which were divided afterwards: Lord PELHAM had the bull and five cows, and the rest went between Lord SHEFFIELD and Colonel HARDY. They were brought over with great expectation; but, perhaps, they were not found to be so distinct from the different varieties of English cattle as to excite any continued demand for them, as they have certainly made but little progress in this country. In size and shape they resemble some of the cattle from the Western Islands, of a high bred deer-like shape; not so broad or so low in the leg as the native Highland Scots. The bull given in this Work was taken from one of Mr. LOWTHER's, of Alserfold, Hants, in September 1813; which was recommended as the only native Kerry bull now in England.

Mr. LOWTHER had also some very pretty cows of the same breed, of which he gives the highest character. It is to be lamented that no distinct account of the weight, the quantity of milk, or other properties, which could afford a fair comparison with other stock, could be obtained, to make the history of them more clear and conclusive. Mr. LOWTHER's bull, in size and substance, is very like some of the Highland bulls; and, in colour and horn, had some resemblance to the Lancashire. The steward of Mr. HERBERT, of Hewness, in Kerry, who procured the bull and cows for Lord PELHAM, has a large track of mountains appropriated to the breed.

SHETLAND CATTLE.

THE cows of Shetland are very small, and, in point of shape, inferior to those of the western Highlands. When fat, some of the cows will weigh from 2 to 3cwt.; oxen from 3 to 4cwt.; but the common run is much less. The quantity of milk is not considerable,—a Scotch choppin (an English quart) twice a day. They are always housed at night: the want of straw is supplied with heath or peat dust. They have but little food either in summer or winter. It is no wonder, therefore, they should give but little milk, or that the oxen should not be capable of work. The stock of Shetland is said to amount to thirty thousand cows, one thousand oxen, ten thousand young cattle; forty-one thousand head. The calves that are reared are not allowed to suck, but are fed on milk first, and then on bland, which, with bad keep, sufficiently accounts for the diminutive size of the stock. Bland is the aqueous remains of the milk after the butter has been extracted: the milk is collected until they have got a quantity, and then churned; and when the butter is about to separate from the serum, they throw in hot stones, and the butter soon floats: what remains is called ballack, which is boiled and skimmed, and then it is called bland, which serves for beverage for themselves and their young stock.

The specimen given in this Work was engraved from Mr. MAITLAND's bull, of Blackwell Hall, sent to him from Shetland, and was black and white.

* It is recorded in the ancient history of Wales, that oxen only were permitted to draw the plough. After the death of Arthur, the Saxon power prevailing, the dispersed Britons were forced to quit England and seek refuge among their brethren in Wales. All the valleys at that time being pre-occupied, the great and sudden influx of the refugees made it necessary, for a season, to cultivate the slopes, and even the summits of the hills, wherever there was found sufficient depth of soil; and for reasons, rather obscure to us, the ridges were generally ploughed straight upwards, and their forms are still visible in several parts of the country. These ridges are frequently so steep as to form an angle of between 30 and 40 degrees to the horizon. This method of ploughing required great strength of oxen; and we find, that when GIRALDUS wrote his Itinerary, in the 12th century, the Welch yoked their

oxen four abreast. In the laws of Howel, yokes of four different lengths are mentioned: the ber-ian, or short yoke of three feet, for two oxen; the mer-ian, or field yoke of six feet, for four oxen; the ceseil-ian, or axillary yoke of nine feet, for six oxen; and the hir-ian, or long yoke of twelve feet for eight oxen. It may be observed, that these feet only consisted of nine inches. This custom of yoking so many animals abreast, has, for some centuries back, been disused in Wales, though still existing in some parts of Scotland, to the extent of four oxen; and there the driver walks backwards between the centre oxen.

DIMENSIONS OF THE WELCH, IRISH, AND SHETLAND CATTLE, GIVEN IN THIS WORK.

						PEMBROKE OX.			KERRY COW.			KERRY BULL.			SHETLAND BULL.		
						Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the	-	-	-	-	-	Hind Quarters			-			-			-		
						Shoulder			-			-			-		
						Knee			-			-			-		
						Hock			-			-			-		
From the Ground to the	-	-	-	-	-	Brisket			-			-			-		
						Chest			-			-			-		
Length of, or from the	-	-	-	-	-	Rump to the Extremity of Hip Bone			-			-			-		
						Pole to the Tail			-			-			-		
						Face			-			-			-		
						Horn			-			-			-		
Round the	-	-	-	-	-	Chap			-			-			-		
						Cheek and Forehead			-			-			-		
						Neck			-			-			-		
						Chest			-			-			-		
						Knee			-			-			-		
						Bone of Fore Leg			-			-			-		
						Coronet of Fore Foot			-			-			-		
						Hock			-			-			-		
						Bone of Hind Leg			-			-			-		
						Coronet of Hind Foot			-			-			-		
Breadth of the	-	-	-	-	-	Horn			-			-			-		
						Face across the Eyes			-			-			-		
						Hips			-			-			-		



London Published by G. Gurrard Jan^y 11. 1810. N^o 4. Queens Buildings Knightsbridge

A FAT PEMBROKE SHIRE OX

Exhibited at Lord Somerville Show 1800



NATIVE IRISH OR KERRY BULL.

from the Rocks of Kilarny & Bantry Bay.

Published March 1. 1814. by G Garrard 23 Old Bond Street.



London Pub. Nov 1st 1805 by J. Garrard 28 George St. Hanover Sq.

A TRUE NATIVE IRISH OR KERRY COW.

In the Possession of Col. Hardy.



London, Pub: March 1, 1802, by George Garsard, Agricultural Museum, 28, George St. Hanover Sq.

A BULL from the ISLAND of SHETLAND,

In the Possession of John Maitland Esq.

THE NEW YORK PUBLIC LIBRARY

10



SUMMARY OF BRITISH CATTLE.

THE particulars of each Breed having been given, a general idea of the whole may perhaps be acceptable. To find the situations of the various breeds, and of their intermediate crosses, let us take a view of all the stock of the Island, from the Southern shore, following the line through Sussex to the Lands-end in Cornwall, and then cross the country to the Northern extremity of Scotland including the Orkney Isles.

The DEVON CATTLE, with which we begin, are considered as nearest to the native breed; and these as well as the Sussex, are said to have been produced by some distant cross with the best Norman, from which their colour is derived. LORD SOMERVILLE considers the Pembroke Cattle as the oldest improved breed in the country; and that it was probably introduced by the Salures, a people of the South of Spain in the early intercourse of the two nations; there being, at this time in that district a breed of cattle, black, with white faces, like the Pembrokes.

After we leave Pembrokeshire, proceeding northward, the first admixture is the Glamorgan; and beyond these the home breeds of Gloucester, Somerset and Wiltshire. It is doubtful whether the Herefords are an original breed; they seem to shew some kindred to the Short Horned, crossed perhaps with the Pembrokes; and the red colour being adhered to by a long course of unmixed breeding, is become fixed, together with the mellow hide and white face. Next in succession come the Shropshire which are evidently a cross between the Hereford and Long-horned cattle. The Anglesea Runt with the Little Mountain Cattle of Wales may be classed with the tribes of native original stock, and parallel with these to the East are found the Long-horned Cattle in Derbyshire, Leicestershire and Cheshire, which last being a dairy county selects all the best milkers that can be produced, on the soil which are chiefly of the Long-horned breed. This breed extends also over Lancashire and Westmorland where it is said to have originated. Passing to the East over the Midland counties we find in Suffolk a polled breed, which bears that name, being quite distinct excellent milkers and highly approved for the Dairy, extending over great part of the adjoining county of Norfolk where there is no distinct breed except indeed a slight neat home-bred stock called Norfolks.

Proceeding to the North we meet the Short-horned breed in Lincolnshire which extends through Yorkshire in various degrees of excellence, and rises into perfection on the banks of the Tees, near Durham, long celebrated for its delicate and valuable stock, called Tees-Water Cattle. The Cow-keepers of London have for many years been supplied from this district, and from the best breeds in Yorkshire. And Short-horned Cattle extend through Northumberland* to the Tweed, and passing into Scotland spread over a considerable tract of country to the Frith of Forth, the Lowthians being stocked with them, and Edinburgh as well as London is supplied with milk from the same stock. Turning back again to the North-west of England, we find that Cumberland has no distinct breed of its own, the feeding districts being chiefly supplied from Scotland. To the North again of this great tract, including the Lakes, we cross the Solway Firth into Scotland, and find ourselves among the Galloway Cattle; a celebrated Polled breed. We must now notice the Airshire Cows, which are Short-horned, neat, and well proportioned, excellent for milk, and no less so for the scales, evidently of the Tees-Water kind. Next in succession, comes, that beautiful breed of cattle, the West Highland; extending from Glasgow on the Frith of Clyde over a wide tract of mountainous country to the Forts William and Augustus in Invernesshire, including the Mull of Kentire, the Isle of Sky, Isla, &c.

Turning back now to the East coast, and beginning from the Frith of Forth, the first breed to be noticed is that of Fife or Angus, a polled breed of very large size, and requiring more time to grow and ripen than the Galloways, though not unlike them in character, excepting their peculiar colour, which is an iron-grey.

* In the vicinity of Alnwick, there is some excellent stock, brought to great perfection by the tenants of his Grace the Duke of Northumberland. Howick, the seat of Earl Grey, has long been celebrated for its Short-horned stock, called Howick Oxen. But these were brought forward under circumstances different from the present, when time was not taken into the account; and we hear of Oxen, 11, 12, or even 16 years old; but after all, their weight does not equal those of the early sort of this day.

To the North of these counties, the Aberdeenshire Cattle are found larger in size than many, and inferior in quality to none, except the primest of the West Highlands. This breed is acknowledged to be good for the plough, which at once stamps its superior value among the breeds of horned cattle. Beyond Aberdeenshire and Fort George the general character is a small Highland breed, denominated Kyloes. The farther we travel to the North the smaller we find the cattle which arises most probably from the influence of the climate, and appears strongly marked in those of the Orkney, and other little Islands, where the climate is bad, and the means of feeding very contracted.

Thus Scotland is principally stocked with its own native breeds, the Dunlop and a few excepted: whilst in South Britain it may be observed that a much greater diversity prevails.

In Scotland there are four breeds of native cattle, viz. the Galloway, the West Highland, the Fife or Angus (a Polled breed resembling the Galloway) and the Aberdeenshire. The Dairy Cows being Short-horned are evidently of foreign extraction, as well as all the crosses with Dutch, Long-horned, Hereford, Devon, &c.

In England the cattle may be divided into four classes, three of which have been imported, viz. the Long-horned, the Short-horned, and the Polled breeds. The middle-horned breeds have been formed by crosses upon the native cattle; of which class there is an infinite variety, chiefly to be found in the Southern countries; whilst the native cattle are still to be met with, in tolerable purity in the high countries and mountainous districts. There are also many varieties of home bred cattle, produced by crosses which cannot easily be traced; some perhaps between the Alderney and Suffolk, a very neat Dairy Cattle, of which the Sheet Cows, and many others resembling them are specimens. The improved Kentish stock is a branch of the true Sussex. Kent, Surrey, Essex, Middlesex, Hertfordshire, Bedfordshire, Buckinghamshire, and part of Oxfordshire having no distinct breed of their own, receive an influx from every breed in the Kingdom; the most beautiful of every class and of every climate are to be found according to the taste and fancy of the wealthy possessors of the soil.* At Lord Somerville's at Cobham, Devons may be found in great perfection: at the Marquis of Stafford's at Woolmer, in Herts, the York Polled: a black and white sort as also at Mr. Pickford's at Market Street: at Lord Cartwright's near Bedford, there

* We also occasionally meet with cattle imported from every quarter of the globe. Varieties from the East Indies may be seen at the Marquis of Salisbury's at Hatfield Park, Herts. At Woburn Abbey there was a great assortment of these Cattle. And it may not be uninteresting to mention here some remarkable crosses which have been produced from them. We have seen them crossed with the Devon, the French, the Scotch, and other breeds; all of which have succeeded wonderfully in point of shape and early maturity. But the most astonishing production of this cross was a specimen exhibited at Lord Somerville's shew in 1814, the production of a Guzzurat Bull and a Short-horned Cow: this animal at four years old was 19 hands high, bulkey, and clean limbed, it was slaughtered by Mr. Giblet of Bond Street. The Duke of Northumberland has a numerous herd of cattle, bred between an Indian Cow and a Kyloe Bull; the rapid increase of these animals is quite astonishing, and they are always in good condition, tho' small, the Indian Cow being only 3 feet 6 inches high, of an ash colour: the progeny have, uniformly, a white list round the muzzle, and a light stripe from the shoulder to the tail, either grey or brown. Some have a black, some a brown, and some a yellow or grey tinge over their hides. They are a very deer-like stock. In 1805 his Grace the Duke of Bedford exhibited a curious mixed bred Cow, bred by Mr. White Parsons, Indian, French and Devon. It was one of the fattest and most delicate animals that has ever been shewn. The next year his Grace exhibited an excellent specimen between a Devon and an African Cow. Sir William Curtis had previously exhibited his Galloway and Indian. Many beautiful beasts have been produced by crosses of various breeds, but the judicious in breeding nevertheless do not encourage this practice. Mr. Baker of Elmore Hall, has bred some very beautiful crosses, particularly a Heifer between a Norman Bull and a Kyloe; and an Ox between his own Short-horned Bull, and a Devon. It does not however answer as a system for breeding—Mongrels bred from Mongrels being always bad feeders.

In order to afford a general idea of the Cattle of the Island it seems necessary to give some estimate of their number. The Cattle given in the Scotch Reports amount to 1,300,000: if therefore those of England and Wales may be calculated at 3,500,000 the total number will be about 4,800,000.

is a large herd of the Suffolk Dun Polled breed : the Hereford as a feeding stock are to be found in the highest perfection, at Mr. Westcar's at Creslow near Aylesbury: an excellent Dairy Farm of this breed has long been established by Lord Sackville at Thrapston ; at Woburn Abbey there is a beautiful Dairy of this breed, as well as specimens of all kinds of Farming Stocks; a Princely Domain that will be held in perpetual remembrance, as the fountain head of all improvement. The farming establishment at Southall begins to acquire notice, for its beautiful yokes of Devon Oxen, and other examples of good husbandry; the seat of Samuel Whitbread, Esq. These are, amongst many others, truly respectable, but too numerous to be mentioned within the limits of this paper. As a public stock, many very beautiful cows of the Tees Water, and Short-horned are certainly to be noticed amongst the multitudinous herds of Milch Cows, in the environs of London, no other breed being admitted.*

* Sir John Sinclair's Report of Scotland gives the following useful and truly beautiful description of a well shaped Ox. The head, fine, clean and small. The collar, full at the breast and shoulders, gradually tapering towards the head. The breast broad and well advanced before the legs. The shoulders, wide and full, having no deficiency either at the chine or collar. The back, broad, flat and nearly level. The chest, full and deep. The ribs, circular. A flat ribbed chest, however deep, with large bones, mark a slow feeding animal. A good judge of cattle, by a slight touch of the fingers, knows the quality of the flesh. This knowledge is not to be expressed in words, and can only be acquired by practice. A thin ear, hides and pelts; and small, fine, and straight bones, are among the indications of a good feeding animal. The horns are chiefly to be regarded as a criterion for distinguishing one breed from another; which may be exemplified as follows :

As it respects the Horn, British Cattle may be divided into three classes. The Middle-horn, the Short-horn, and the Long-horned. To which must be added, those without horns, the Polled breeds, which are supposed to have sprung from the Short-horned tribes, however different the various Polled Cattle may at this time appear.

The Middle-horned breed comprehends what are called the Native breeds, that is the Wild Cattle, and all related to them : having a horn, generally, near a foot long, and taking rather an upright direction. The Devon, the Sussex, and most of the Native Scotch, Welsh, and Irish breeds, the Hereford Cattle, shew a mixed breed by their horns; they point more downward, and are inclined often to approach

Table of Dimensions, giving the Points of Eight Beasts, as follow :

Mr. Foljamb's fat Cow of the Driffield breed fed at Osberton in 1812. Mr. Pickford's of Market Street, Herts, Bull and Cow of the York Polled breed, shewn at Smithfield in 1808, which were much admired, but, being considered a cross breed, were not admitted to the competition. The well known good management of the proprietor is the best recommendation of the sort. The Duke of Bedford's York Polled Cow was taken in 1797, in the late Duke's time. The dimensions of Sir John Chetwood's York Polled Bull were sent by Sir John from Oakley, Staffordshire. Mr. BAKER's two beautiful cross bred beasts were fed at Elmere Hall. The Norman and Kyloe was one of the most beautiful beasts that has been produced, both in shape and quality. Dead weight 93st 10½lb. the four quarters 68st. 10lb. 7oz. the offal was little more than ¼, whereas in fat animals it is in general ½. The Roan Ox, Devon and French, weighed 90 stone dead weight, four years old. The half bred Galway and Indian was bred by Sir William Curtis in 1804. The half bred Ox between the Gusurat and Short-horned Cow, previously mentioned was slaughtered at Gible's after the spring shew in 1814, weighed 2377lbs. or 297st. 1 of 8lb. or 169st. 10lb. of 14½lbs. to the stone; and this enormous Ox was scarcely half fat, 4 years old; bred and fed by Lord Foley.

each other at the points, like the Short-horned breed. Several of the mixed breeds shew the same doubtful character, which plainly marks their family. The horn seldom rising much above, or falling much below a right angle with the line of the face. The Horn of the true Short-horned Cow seldom exceeds seven inches in length, is often only four, and never rises above a right angle with the face. It is often crumpled, and sometimes scarcely perceptible. The horn of the Long-horned breed always takes a downward direction from the face; inclines forward in an elegant line, and sometimes encloses the face in a circle, by the points approaching each other. They are seldom less than from 18 inches to 2 feet in length. They will vary in their direction, sometimes starting out, in a straight line from the head; as in Bandy, whose portrait has been given in the course of the work : sometimes turning under the throat, or behind the ear; but never rise above a right angle with the face. The horn of the Ox is sometimes three feet six inches long; which is also the case with the Wild Ox of Britain, whose horns however give it a very wild aspect, taking an upright direction or nearly so; while those of the Long-horned Ox, afford an elegant line, turning sideways and downwards. Thus we find, that the horn either by its length or direction affords a means of discovering with accuracy all the distinct classes of Oxen.

Dimensions of EXTRA CATTLE.				Duke of Bedford's York Polled Cow.			Sir John Chetwood's York Polled Bull.			Sir William Curtis's Indian Galloway.			Mr. Baker's Norman and Kyloe Heifer Black.			Mr. Baker's Ox Short-horned and Devon Roan.			Mr. Foljamb's Driffield Fat Cow.			Mr. Pickford's York Polled Bull.			Mr. Pickford's York Polled Cow.		
				Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the	{	Hind Quarters.....		4	10	0	5	0	0	3	6	0	3	9	0	4	7	$\frac{1}{2}$	4	10	0	4	8	0	4	6	$\frac{1}{2}$
		Shoulder.....		4	8	0	4	11	0	3	7	0	3	11	0	4	7	0	4	9	0	4	6	0	4	5	0
		Knee.....		1	2	0	1	2	0	0	10	0	1	0	0	1	2	0	1	4	0	1	2	0	1	4	0
		Hock.....		1	8	$\frac{1}{4}$	1	6	0	1	0	0	1	4	0	1	6	$\frac{1}{2}$	1	9	$\frac{1}{2}$	1	6	0	1	8	0
From the Ground to the	{	Brisket.....		1	8	$\frac{1}{4}$	1	6	$\frac{3}{4}$	0	11	0	1	1	0	1	5	0	1	10	0	1	3	0	1	7	0
		Chest.....		2	0	0	2	0	$\frac{1}{4}$	1	0	$\frac{1}{2}$	1	2	$\frac{1}{2}$	1	7	0	1	7	0	1	7	0	1	10	0
Length of, or from the ..	{	Rump to Extremity of Hip Bone		2	2	$\frac{1}{2}$	2	1	0	1	7	0	2	3	0	2	0	0	2	10	0	2	0	0	2	1	0
		Pole to the Tail..		7	0	0	7	10	0	6	0	$\frac{1}{2}$	6	6	$\frac{1}{2}$	7	4	0	7	2	0	6	1	0	7	3	0
		Face.....		1	6	$\frac{3}{4}$	1	10	$\frac{1}{2}$	1	2	0	1	4	0	1	8	0	2	0	0	1	10	0	1	8	0
		Horn.....		0	0	0	0	0	0	0	0	0	0	9	0	0	1	4	0	0	10	0	0	0	0	0	0
Round the...	{	Chap.....		1	9	$\frac{1}{2}$	1	3	$\frac{1}{2}$	1	2	0	1	0	$\frac{1}{2}$	1	10	0	1	7	0	1	10	0	1	8	0
		Cheek and Forehead.....		3	5	$\frac{1}{2}$	3	4	0	2	9	0	3	4	0	4	2	0	3	10	0	3	11	0	3	6	0
		Neck.....		2	9	$\frac{1}{4}$	3	9	0	2	7	0	3	0	0	3	11	0	3	7	0	3	5	0	2	10	0
		Chest.....		7	6	0	7	3	0	6	0	0	7	6	0	7	9	0	8	0	0	7	7	0	7	9	0
		Knee.....		1	1	$\frac{1}{4}$	1	2	$\frac{1}{2}$	0	9	0	0	10	$\frac{1}{2}$	1	2	$\frac{1}{2}$	1	2	0	1	3	0	1	0	0
		Bone of Fore Leg.....		0	8	0	0	9	0	0	4	$\frac{1}{4}$	0	5	0	0	6	$\frac{1}{2}$	0	8	0	0	8	0	0	7	0
		Coronet of Fore Foot.....		1	0	0	1	0	0	0	8	0	0	10	0	0	11	0	1	0	0	0	11	$\frac{3}{4}$	0	11	0
		Hock.....		1	4	$\frac{1}{2}$	1	3	0	1	1	0	1	0	0	1	4	$\frac{1}{2}$	1	9	$\frac{1}{2}$	1	6	0	1	5	0
		Bone of Hind Leg.....		0	9	0	0	9	$\frac{1}{2}$	0	5	$\frac{1}{2}$	0	5	$\frac{1}{2}$	0	7	$\frac{1}{2}$	0	9	0	0	9	0	0	8	0
		Coronet of Hind Foot.....		1	1	0	0	11	$\frac{1}{2}$	0	9	0	1	2	0	1	3	0	1	2	0	1	0	0	1	0	0
Breadth of the	{	Horn.....		0	0	0	0	0	0	0	0	0	5	0	0	9	0	0	7	0	0	0	0	0	0	0	
		Face across the Eyes.....		0	9	0	0	10	0	0	7	0	0	8	0	0	11	0	0	8	0	1	0	0	0	8	0
		Hips.....		2	0	0	2	0	$\frac{1}{4}$	1	7	0	2	2	0	2	0	0	2	9	0	1	11	0	2	2	0

THIS TABLE is taken from Mr. BAILEY'S REPORT of NORTHUMBERLAND, GIVING THE WEIGHTS AND DIMENSIONS OF THE MOST REMARKABLE LARGE BEASTS THAT HAVE BEEN PRODUCED, TO WHICH THE TWO LAST ARE ADDED.

Names of Oxen.		Age.	Length from horns to rump.			Crops.		Height at Loins.		Breast from ground.			Crops.		Girths at Belly.		Loins.		Breadths at Hips.		Breadths at shoulder.		Weight of carcass.		Weight of Tallow.		Weight of Hide.	
		Yrs.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	st.	lbs.	st.	lbs.	st.	lbs.
Blackwell		6	9	5½	6	05	8	2	1	10	6																	
1782.	Howick Red	7	9	4	6	05	10	1	11½	10	0	10	8	10	1	2	10	2	9	152	9	16	7	9	2			
1787.	Ditto Mottled	7	9	8	5	105	9½	1	7	9	8	10	10	9	10	2	11	2	7	152	8	16	0	9	11			
Burningham		5																		150	4	16	0	9	2			
1790.	Mr. Charge's	7	8	2	6	2		1	8	10	7	10	8	10	10	2	9	3	0½	168	10	13	0					
1795.	Mr. Calling's	5	8	4	5	35	5	1	6	10	0	10	2	10	2	2	7	2	7	168	0							
1802.	Ditto	10	8	9	5	55	5	1	9	10	8	10	10	10	3	3	13	0	200	6	Live Weight.							
1813.	Mr. Nesham's	7	8	1	5	35	5	1	7	10	8	10	10	10	1	3	6	3	9	168	0	Sinking the Offal.						



London. Pub. Aug. 1841, by G. J. G. Agricultural Museum, 28, George St. Pancras Spu.

A YORKSHIRE POLLED COW,

from the Duke of Bedford's Park.



ABEautiful YORKSHIRE COW.

Point of Shoulder 4.10
 From Fore to Tail 7.2
 Round Chest 8.0
 Skin 2.2

Spent 9 months in the hands of the late Mr. John Smith, who was the first to breed the cow. It was the first of the breed in the country.

Live Weight 1650
 4 Quarters 350
 Fat 100
 Bones 100



London Pub. Nov. 1. 1805 by J. Garrard 28 George St. Hanover Sq.

A FAT GALLOWAY HEIFER

Exhibited by Alderman Curtis at Smithfield Christmas Show 1804.

A L D E R N E Y C A T T L E.

VARIETIES of the short-horned class are spread over great part of the north-west district of Europe, and have been brought into England under the various descriptions of the Holstein, Dutch, Flemish, Norman and Alderney; the last of which, the subject of this enquiry, is a Breed of Cattle imported from the Islands of Guernsey and Jersey, few being obtained from the small Island of Alderney, from whence they derive their name. They may be considered as the high bred Cattle of the Short-horned class; being bred in a warmer climate than the rest, they have acquired a density of bone, and other valuable qualities, which is exemplified in the richness of their milk, and all those properties attached to what is called High-bred Stock. In respect to size, the Cows seldom exceed four feet, the Bulls from four to four feet two, Oxen from four feet three to four feet seven.

As to colour, they are very distinct from all other cattle in England; and although in a general description we might say there are some red and white, and some black and white, &c. in common with other cattle; yet, upon a nice observation it will be found, that the colours are more brilliant, and have a greater variety in examining the whole surface of the animal, than is to be found in any other neat Stock in Britain. We find in them all the variety of colour peculiar to the different sorts of Fallow Deer*; and this Breed of Cattle greatly resembles also the Deer in the neatness and elegance of its limbs and general form.

The following is the account given of the Breed as transmitted to the author from the Secretary of the Agricultural Society of Jersey. The Cows excel in the quality of their Milk, of which they give from three to four gallons a day; and in one year the produce of a good Cow in Butter may be from 220 to 300 wt. the pound being 2 oz. heavier than the English. Some Cows in the season have given fourteen pounds a week. The Calves fatten very well, and the Veal is excellent, best at five weeks old; the average weight per quarter is as follows.

		lb.	lb.
Of a Calf of	One Month old from	- - - - -	12 to 15
	Two Months old	- - - - -	18 — 24
	Three Months old	- - - - -	24 — 36

* The hide is stained nearly in the same manner as we find that of the Fallow Deer; but if white is any where discovered in an Ox, it is always as the ground upon which the other colours are spread. In the Deer Tribes the white is produced in spots upon a coloured ground.

The Cattle are healthy, and subject to no particular disease; though in England they bear the strongest winters out of Doors, yet from custom they are always housed in the Islands, and then fed upon straw; they are easily fattened at any age, best at four or five years old; for this purpose parsnips are generally cultivated; though with time they may equally improve on turnips, potatoes, or any of the methods usually practised, as they are not very dainty. The price in 1799 was

						£.
For a good Cow and Calf about	-	-	-	-	-	15
For a Dry Cow	-	-	-	-	-	10
For a Calf one year old	-	-	-	-	-	4
For a good Ox for the yoke	-	-	-	-	-	18

The Oxen are sometimes used for Ploughing; when a more than ordinary strength is required, they then are yoked two together upon a kind of cross, and Horses in sufficient number put before: but their greatest use is in carting, where an Ox is always put in the shafts, and is found to answer best in bad roads of the hilly country.

The usual Weight

		lb.			lb.
Of a Heifer is about	-	-	350	of the Hide	- - 36
Of a Cow	-	-	500	_____	- - 50
Of an Ox	-	-	1000	_____	- - 90

Hides sold in 1799 at 6d. per lb.

The Alderney in appearance resembles much the Norman Cows of the coast, but they differ in quality; the best cows there not exceeding 8lb. of Butter in a week, in the best season; nor is their Butter of so fine a flavour or colour as that of Jersey and Guernsey.

The specimen of Alderney Cattle given in this Work. The Bull is from Lord Howe's stock; the Cow was in the possession of Lord Stawell, and the Ox is from the stock at Woburn Abbey. Bred by Mr. Crook of Tytherton in Wiltshire.

DIMENSIONS OF THE ALDERNEY CATTLE.

							BULL.			COW.			OX.		
							Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the - - - - -	{	Hind Quarters	—	—	—	—	4	0	$\frac{1}{2}$	3	9	$\frac{1}{2}$	4	7	$\frac{1}{2}$
		Shoulder	—	—	—	—	3	11	0	3	8	0	4	7	0
		Knee	—	—	—	—	0	11	0	1	0	0	1	2	0
		Hock	—	—	—	—	1	6	0	1	6	0	1	7	0
From the Ground to the	{	Brisket	—	—	—	—	1	4	0	1	4	0	1	9	0
		Chest	—	—	—	—	1	6	$\frac{1}{4}$	1	5	$\frac{1}{2}$	2	0	0
Length of, or from the	{	Rump to the Extremity of Hip Bone	—	—	—	—	1	7	0	1	6	$\frac{1}{2}$	1	11	0
		Pole to the Tale	—	—	—	—	6	2	0	5	10	0	6	2	0
		Face	—	—	—	—	1	5	$\frac{1}{2}$	1	5	0	1	8	0
		Horn	—	—	—	—	0	8	0	0	6	$\frac{3}{4}$	1	6	0
		Chap	—	—	—	—	1	6	0	1	4	$\frac{1}{2}$	1	5	0
		Cheek and Forehead	—	—	—	—	3	4	0	2	10	$\frac{1}{2}$	3	7	0
		Neck	—	—	—	—	3	0	0	2	6	$\frac{1}{2}$	3	4	0
		Chest	—	—	—	—	6	0	0	5	5	0	6	11	0
Round the - - - - -	{	Knee	—	—	—	—	0	10	$\frac{1}{2}$	0	10	0	0	11	$\frac{1}{2}$
		Bone of Fore Leg	—	—	—	—	0	6	$\frac{1}{2}$	0	5	$\frac{1}{2}$	0	7	$\frac{1}{4}$
		Coronet of Fore Foot	—	—	—	—	0	11	0	0	10	$\frac{1}{2}$	1	1	$\frac{1}{2}$
		Hock	—	—	—	—	1	0	0	0	11	$\frac{1}{2}$	1	4	0
		Bone of Hind Leg	—	—	—	—	0	7	0	0	6	$\frac{1}{2}$	0	8	0
		Coronet of Hind Foot	—	—	—	—	0	10	0	0	10	0	1	0	$\frac{1}{2}$
		Horn	—	—	—	—	0	8	0	0	4	$\frac{1}{2}$	0	7	0
		Face across the Eyes	—	—	—	—	0	11	0	0	8	0	0	10	0
Breadth of the - - - - -	{	Hips	—	—	—	—	1	7	0	1	6	$\frac{1}{2}$	1	10	0



London, Pub. July 29, 1801, by G. Garrard Agricultural Museum, 28, George St. Hanover Squ.

AN ALDERNEY BULL,

from Carl How's Stock.



London. Pub. Nov 26, 1802. by G. Garrard, Agricultural Museum, 28, George St. Hanover Sq.

AN ALDERNEY COW,

In the Possession of Lord Stawell



London. Pub April 1st 1803 by G. Garrard at the Agricultural Museum 28 George St. Hanover Squ^r

AN ALDERNEY OX.

From the Stock at Woburn Abbey Bred by Thomas Crook Esq. of Tyltherton Wiltshire.

CATTLE FROM THE EAST INDIES.

IT is to be lamented that Gentlemen visiting the East Indies should have bestowed little or no attention upon the domestic animals of the country, from which we could obtain but few authentic documents to found our description upon; but from the specimens that have been brought into England, we may form some idea of their variety and beauty.

The activity and usefulness of the cattle in the East Indies strikes the European with astonishment; as there, they are not only applied to the purposes of husbandry, but to draught carriages in general. And we are informed, that it is not uncommon for a pair of Bulls to travel with a hackery or light curricule at the rate of ten miles an hour. The expedition with which heavy artillery is conveyed over extensive and mountainous countries in time of war, which is performed by Oxen, has always been a subject of surprize to those acquainted only with the sluggish cattle of the Northern World.

It has of late occurred that some of the breeds of cattle in the British Isles might receive great improvement from a cross with those from the East Indies; and that, not only the heaviest breeds, but even the Devons and the more active might be improved by such a measure. Some experiments have been made, but we have to regret that not any have yet been pursued with that spirit requisite to produce a fair and conclusive result. The breeders are in general disgusted with the first appearance of these animals, having been taught to consider any weight upon the neck of a bull as a defect, and of course highly objectionable in an animal from which the stock is to be reared.* The hump on the shoulders of these bulls in a moment decides their fate in the eyes of a prejudiced breeder: but if some further inquiries were to be made, perhaps valuable properties, and shape, might be discovered in them to counterbalance this apparent defect. In high spirit and fine bone they are superior to the cattle of Britain, the quality of their flesh when slaughtered is allowed to be excellent; and they are equally distinguished by quick maturity. The defects of a ridge back, and a hollow chine are seldom to be found among them. The hip bones do not project to any breadth, but the loin is generally full and broad, and the back so well clothed with flesh as to form a hollow channel in the middle. Thus the top of the beast, and of course the most valuable part, must cut up to great advantage. Their general inclination to feed, is evident, as they are always in good condition upon moderate keep; and the quantity of prime meat, in proportion to the coarse and offal, is found in a greater degree than in the generality of other cattle. This conclusion may be drawn from the specimens that have fallen under the observation of the author.

To describe these animals it may be observed, that they all possess a similarity of countenance; and which is long and narrow, and has a mild and elegant appearance, nearly the same both in the Bull

* See note in the description of Devonshire cattle, in which the high rising fore end of the Bulls of that breed is particularly investigated; and some observations drawn from the œconomy of nature, to prove that the thickness upon the neck of a Bull, and other masculine distinctions cannot be defects; and it should be observed that the hump of these animals is considered as a great delicacy in the East Indies.

and Cow; yet there are sufficient variations in the different breeds which distinguish the Guzarat from the Bengal and Ceylon, and each of these from the others, as distinctly as we find the varieties marked in the breeds of British cattle, by which we immediately know an Ox of Herefordshire from one of Devon or Holderness. They are generally of an ash-colour, tending to black in the fore parts, and yellow under the belly, the tints imperceptibly blending into each other. There are other varieties, such as black and red spotted on a white ground; some are all red, brown, or black.

The Oxen of the Guzarat Country are the largest of East-Indian cattle, rising sometimes fifteen hands to the top of the back, the hump projecting six or eight inches higher. The character of the head, and indeed of the whole figure, excepting the hump, very much resemble the bulls we find upon the bass-reliefs of antique sculpture. The quantity of dew-lap, which is suspended in beautiful folds from the neck to the brisket, and passes under the belly, both of the bull and the cow, answers to Virgil's description as translated by Dryden.† Which shews, that our subject, the cultivation of domestic animals, was treated with serious attention by the greatest men of that time.

The Bengal Bull, or the Bull of the Gentoo Country, differs from the Guzarat in height, seldom exceeding ten hands. He is cleaner in the throat, and has no dew-lap passing under the belly. The small Bull of Ceylon is about the size of a goat, from seven to eight hands in height, rather large in the head, and not so well proportioned as those produced in the other parts of the East Indies; it is said to inhabit chiefly the mountainous districts.

The particular distinction of each breed in regard to the size and direction of the horn, appears to be as evident in the East-Indian cattle as in those of the British Isles. The Horn of the Guzarat Bull is about seven Inches in length, and nine in circumference, taking a direction nearly strait from the head, and rather inclining outwards. The Horn of the Bengal Bull at first shoots upwards, and then curves forward in an outward direction. It measures seven inches in length, and is seven inches round.

† The generous Youth, who studious of the Prize,
The Race of running Coursers multiplies;
Or to the Plow the sturdy bullock breeds,
May know that from the Dam the worth of each proceeds.
The Mother Cow must wear a low'ring look,
Sour-headed, strongly-necked, to bear the Yoke.
Her double Dew-lap from her chin descends,
And at her thighs the pendent drapery ends.

Long are her sides and large, her Limbs are great;
Rough are her ears, and broad her horny feet.
Her Colour shining black, but flicked with white.
She tosses from the Yoke; provokes the fight;
She rises in her gait, is free from fears;
And in her Face a Bull's resemblance bears:
Her ample forehead with a star is crown'd;
And with her length of tail she sweeps the ground.

VIRG. Geo. III. Line 83.

In regard to the Bone of the cattle from the East Indies, it is of a very different character from this description, unless it may be supposed, that the cattle of Italy, in Virgil's days, were small in the bone to a defect: it being as necessary, in some instances, to increase the quantity of bone, as in others to reduce it.

The Horn of the Ceylon Bull curves backwards, and then projects in an outward direction from the head. It measures six inches long, and is about the same in circumference. The Horns of these different specimens of East-Indian cattle are blunter at the points, and have not that polished surface peculiar to the beasts of this climate. It is a common practice with the natives of India to gild and decorate the horns of their cattle, which possibly may have originated from the coarseness of their appearance.

The Oxen of the Guzarat country are reckoned the best for draft. The mode of harnessing the oxen for the hackery or curricule: the bridle is formed of a cord passed through the nostrils and fastened behind the horns, the reins being fixed near the mouth, by which they are readily stopped or turned: the bar of the curricule is laid across the neck before the humps, and the neck is inclosed by a hoop like a common yoke: active cattle well broke, are extremely valuable, which is increased, if the animal is wholly white. The attention paid to them is similar to that paid to horses kept for such purposes in this country. The horns of the Ox grow to a greater length than those of the Bull, inclining to each other at the points, which the natives increase whilst the horn is in a growing state, by drawing them together with cords and paring the inside of the horn, thus to form a circle on the top of the head, which gives additional value to the beast. Vegetation being scarce, the expence of keeping cattle in India is considerable; as one, and sometimes two men are employed in collecting provender for a single beast, which is done by digging up a kind of thin grass, something like Bent, which has a considerable quantity of roots; these are washed, and being mixed with a small pea, called Gramn, previously softened in water, form the principal part of the food for working oxen and milch cows. The feeding cattle are kept upon straw.

Many varieties of these cattle have been brought into England, but till within a very late date no serious experiments have been tried, how far they might be applied to purposes of improvement, some common ideas having prevailed that Mules would be the effect of a cross with the cattle of this climate;

but Mr. White Parsons,* one of the most distinguished Breeder of Devonshire Cattle, and many other persons are now making experiments.

In respect to the Dairy we have nothing to look for, as good feeding cattle are seldom profitable milkers—six quarts a day, we find, is the general product of the largest breed which has been kept for many years at Bilton Hall near Tadcaster, the seat of W. Plumer, Esq. They are found to be hardy and healthy, bearing all weathers, full as well as other cows, and under the same treatment—the cattle of the country are the Holderness. The middle-sized breed has been established for some time at Hatfield Park, Hertfordshire, the seat of the Marquis of Salisbury, and are said to yield a good quantity of milk in proportion to size; they are always found in good condition upon little keep; the calves come very forward, and are excellent veal, which proves that the milk must be nutritive, though small in quantity. They suffer from wet and cold, but are in high condition in the summer, and are not annoyed by the flies in the hottest weather.

The examples given in this work, those from Guzarat and Ceylon, were done from the stock at Wooburn Abbey. The Cow and Calf were taken from a specimen that was sent to Wooburn when the author was there; but not having time to take the dimensions, he has given those of Lord Salisbury's Bull, a model of which, with the other two, is placed in the Agricultural Museum in London.

* "I shall have the pleasure of shewing you my new Devons, which, as a painter, I know you will say have a finer claim to positive beauty than any you have yet seen—they are Calves got by an Indian Bull, given me by His Grace the Duke of Bedford, upon two year old new Devon Heifers, and are as fat as quails at a month old, and worth three guineas a-piece to kill, which proves the blending system to be right, as it is in favour of quick growth, small bone, and finest quality; and there can be no doubt but that their hides, flesh, milk and tallow, will be of a superior quality and value."

Mr. W. Parsons to the Author.

DIMENSIONS OF EAST-INDIA CATTLE GIVEN IN THIS WORK.

						GUZARAT			BENGAL			CEYLON		
						BULL.			BULL.			BULL.		
						Ft.	In.	Qr.	Ft.	In.	Qr.	Ft.	In.	Qr.
Height of the	{	Hind Quarters	—	—	—	4	4	$\frac{1}{2}$	3	7	0	2	9	0
		Hump	—	—	—	5	0	0	3	11	$\frac{1}{2}$	3	0	0
		Knee	—	—	—	1	0	$\frac{3}{4}$	1	8	$\frac{1}{2}$	1	0	0
		Hock	—	—	—	1	8	0	1	3	0	0	9	0
From the Ground to the	{	Brisket	—	—	—	1	4	0	1	0	0	1	4	0
		Chest	—	—	—	1	9	0	1	6	0	1	3	0
Length of, or from the	{	Rump to the Extremity of Hip Bone	—	—	—	1	8	$\frac{1}{2}$	1	11	$\frac{1}{2}$	1	1	$\frac{1}{4}$
		Pole to the Tale	—	—	—	6	4	0	5	1	0	3	4	0
		Face	—	—	—	1	8	0	1	3	0	1	0	0
		Horn	—	—	—	0	7	0	0	7	0	0	6	$\frac{1}{2}$
		Chap	—	—	—	1	6	4	1	4	0	1	0	0
		Cheek and Forehead	—	—	—	3	7	0	3	0	0	2	2	$\frac{1}{2}$
		Neck	—	—	—	3	3	0	3	0	0	2	3	0
		Chest	—	—	—	6	4	0	5	4	0	3	7	0
Round the	{	Knee	—	—	—	1	0	0	1	0	0	0	7	0
		Bone of Fore Leg	—	—	—	0	7	0	0	11	$\frac{1}{2}$	0	4	0
		Coronet of Fore Foot	—	—	—	2	10	0	0	7	0	0	7	0
		Hock	—	—	—	1	0	$\frac{1}{2}$	0	11	0	0	9	0
		Bone of Hind Leg	—	—	—	0	7	$\frac{3}{4}$	0	6	$\frac{1}{4}$	0	4	3
		Coronet of Hind Foot	—	—	—	0	11	0	0	8	0	0	7	0
		Horn	—	—	—	0	8	0	0	6	$\frac{1}{2}$	0	4	$\frac{1}{2}$
Breadth of the	{	Face across the Eyes	—	—	—	0	9	0	0	7	0	0	6	0
		Hips	—	—	—	1	7	0	1	4	0	0	8	$\frac{1}{2}$



Pub by G. Gervard London. Jan 1st 1801

A BULL.

of the Largest Breed of East Indian Cattle Common in Persia



Pub by G. Gurnard London Jan^{ry} 1801

A. G. D. W.

The Middle East & the East Cattle Common in Persia



Pub by G. Gassard London. Jan. 1st 1801.

A BULL

From the Great East Indian Cattle Common in the Island of Ceylon

WILD CATTLE.

THE WILD BULL OF BRITAIN.

THIS Animal is said to be of the aboriginal of British Cattle. It is certain they have been a distinct breed in Lord TANKERVILLE's Park for a great number of years. The breed consists, at this time, of about one hundred, of all ages, and they are as wild as any animals whatever, indeed more so than the Fallow, or even Red Deer, usually in Parks; not suffering any person to approach them. But if such an attempt is made, the Herd collects in one body, and facing about, present themselves in battalion; but before you can advance within gun-shot, the leading Bull makes off at full gallop, and the rest follow, kicking and bellowing till the hills resound. Upon these occasions, they take a large circle of about two miles, and facing their enemy, again they gallop off, making a less circle, and so on until the visitors see it prudent to retire: after which they will not settle to their pasture for several hours, causing that lean, gaunt, and wild appearance, making a breed of Cattle completely distinct. When any of them are to be killed, no attempt is made to separate them, but a keeper goes out, with proper precautions of dogs and assistants, to secure the animal when shot; and in this way many serious Bull-fights occur. It is evident from the general shape and appearance of the stock, and particularly from an Ox reared by the keeper, that the Breed possesses qualities that would, no doubt, turn to considerable profit, if it were put into a state of cultivation. A more neat and beautiful stock could not be produced, taking them in all points, of shape, colour, and quality, the latter being now in its lowest state, for want of proper selection in the breeding, which cannot be regretted whilst they present so grand and dignified a feature in *Chillingham Park*, striking all that witness the scene, as one of the most dignified in Nature.

The scenery they occupy seems well calculated to show them to advantage, the park consisting of large open plains, bounded by hills on the East, with the ground sloping to an extensive valley, backed by the Chiviot Hills on the West. In the park are some deep ravines, well wooded, which afford shelter from the sun in summer, as well as from storms in winter. It is truly beautiful to see this vast herd of white Cattle making through one of these ravines: the opposite bank will be covered before the whole have descended, producing a most brilliant and interesting effect, to charm the eye of the Painter. Whilst the Bulls on the opposite side bellow and lead forward, a furious dam, on the nether cliff, turns back to protect her tottering offspring.

The size of the Wild Cattle is much the same with the Devon, and in shape many individuals are similar, except that the bone is generally coarser: in shape the Scotch cattle come nearer; but the horn is more erect, and larger: that of the Ox, generally 3 feet long, and 3 feet 6 inches from point to point. A few Oxen are made by toiling the Calves when young. They are of an uniform colour, white, with a red tassel pendent from the ear; the hair streaming out very long; the ear is also stained with red spots round the edge; the tips of the horn and hoofs are black, and the eye-lids are black and flesh-spotted: this is invariable in all*.

The dimensions of the Cow and Bull given in the table were sent by Mr. BAILEY, Steward to the Earl of TANKERVILLE, at Chillingham; those of the Ox were measured from the animal by the Author.

* Wild Cattle, said to be the original breed of British Cattle, now only to be found in Chillingham Park, in Northumberland, the Seat of the Earl of TANKERVILLE; and it is probable they are the only remains of the true and genuine breed of this species of Cattle. There are Cattle denominated Wild Cattle, in other parts of the kingdom, Hamilton, Drumlanrig, &c. but these of Chillingham are the only remains that answer to the description given by the ancient Author, BOETHIUS, of this breed of Cattle.

“ The mode of killing them was, perhaps, the only modern remains of the grandeur of ancient hunting.—On notice being given that a Wild Bull would be killed on a certain day, the inhabitants of the neighbourhood came in great numbers, both horse and foot. The horsemen rode off the Bull intended to be killed from the rest of the herd, until he stood at bay; when a marksman dismounted and shot, remounted and galloped off, and then another approached and fired. In this way, at some of these huntings, twenty or thirty shots have been fired before the animal was subdued. On these occasions the bleeding victim became furious from the wounds and the surrounding shouts of savage joy that were echoed from every side, and the confusion and mischief that ensued can better be conceived than described. This custom, attended with many accidents, is now discontinued. It is said, that when any of the herd happen to be wounded, or grown old, or otherwise decrepit, the rest run upon it and gore it to death.

“ The weight of the Oxen is from thirty-five to forty-five stone; and Cows from twenty-five to thirty-five, of fourteen pounds: the beef is finely

THE NORMAN BULL,

GIVEN in this Work, was engraved from a picture of a specimen presented to his Grace, FRANCIS Duke of BEDFORD, by Mr. THOMAS BROOK, of Titherton, in Devonshire, who had been very successful in crossing the Devon with that stock. They are an excellent variety of the short-horned; and it is supposed that the Devon and Sussex breed may have originated between some such cross (brought over by the Normans) and the native Cattle.

AFRICAN BULL, FROM SIERRA LAON.

THE African Bull given in this Work was presented to his Grace, FRANCIS Duke of BEDFORD, and said to be a native of Sierra Laon. It was an animal of singular character in appearance and quality, and was rather of an irritable and wild temper. It had, like most animals of hot climates, large muscles and very fine bone, being in a proportion, in that respect, never found in any of the Cattle in this country, with a short pile on his hide, which was thin and of a very high-bred quality, consequently he was much heavier of his size than a long-haired rough beast of the same height. The power of this little animal was far beyond his appearance, driving all the largest beasts he met on the road into the ditches, clearing the way as he passed through them. Much pains have been taken to get at some account of this breed, but without effect. The late Lord ORFORD, curious in animals, in 1789 had some true African Cows, and the Author of this Work regrets that he did not make correct studies from them; as he at that time painted a picture of the Bull, which was black and white, and in shape resembling the Bull now under consideration, but much smaller every way. He received the following letter from a friend, who had been on the African station †.

THE WILD BISON.

HAVING gone through the general characters of the Oxen common to Great Britain, with examples of those of the Continent and the East Indies, it remains to give some account of the Wild Bison, the origin of the Ox species, which is found in the forests of Lithuania, in Germany. The hump of this animal differs from that of the Bison of the East, the high rising shoulder being occasioned by the elongation of the spinal processes of the vertebræ; whilst that of the Bison of the East is nothing more than a fleshy protuberance. The figure of the Wild Bison is rendered terrific from its disproportion, the shoulder rising to the height of six feet, whilst the hind parts do not exceed four feet; its limbs are neat, and it is extremely active, in proportion to its bulk: it resembles the Lion in its

marbled, and of excellent flavour. From the nature of their pasture, and the frequent agitation they are put into by the curiosity of strangers, it cannot be expected that they should get very fat, yet the six year old Oxen are generally very good beef; from whence it may be fairly supposed, that in proper situations they would feed well.”——BAILEY's *Reports of the County of Northumberland*.

† “ DEAR SIR,— My stay at Sierra Leon was so short as to prevent my having any opportunity of seeing, to my recollection, any Cattle of the tribe you allude to. My first residence on the African coast was at Fort St. James, Acra, of which I was Governor some years, at which time I bred great numbers of Cattle myself, not only for my own table, but to supply the men of war that visit the Settlement, nine a year; as also for the use of British shipping trading on that part of the coast. In respect to size, they are rather larger than the Scotch or Welch, sometimes as large as the common English Cattle. The colour varies just as it does in England. Respecting milk, I can give no information, as the Cows are never milked, Goat's milk being preferred, perhaps from the wildness of the Cattle: and for the same reason they are never broke to the plough; the tillage is always done by hand. The Cattle are driven to pasture in the morning; and if a Calf be dropped during the day, the herdsman brings it home on his shoulders, or it would be devoured by the Hyænas at night: which is the case too often of any stray full-grown Cattle.”

fore-parts, having a long shaggy mane, and a beard under its chin; the head is small; projecting eyes, red and fiery; the forehead is extensive, and the horns large and wide spreading. There is no pursuing him with safety, except in forests where the trees are large enough to hide the hunters. They are generally taken in pitfalls. The animal from which the print is engraved, was exhibited in Exeter Change some years since, (1793,) and was considered a small specimen.

THE BUFFALO.

THE East Indian Zebu and Bison, with the hump, having improperly obtained the name of Buffalo, it has been thought necessary, in order to clear up this error, to introduce a print of the real Buffalo, taken from one brought from the East Indies, where they are used in great abundance in the occupations of agriculture, for which they are well calculated, being so powerful as to do the work of two horses. Upon referring to the Table of Dimensions of the animal, it will be seen that it has a much larger frame than any of the Bison tribe, being two feet six inches across the hip bone, and all the bones being proportionably larger. It much resembles the Cow, and in many respects is rather like the Camel, though absolutely a distinct species of itself. This animal was exhibited in the Haymarket, London, 1799.

It is found in great varieties in Tartary, China, Africa, America, and particularly under the torrid zone, varying from each other in almost as many instances as the Bison species*.

CONCLUSION.

THE diversity of the Ox species, and their pliancy to rural economy, is most conspicuous. The Urus and Bison of Lithuania, are nearly as large as the Elephant; while the Kyloe of the West Highlands, the little Cattle of

Africa, or those of Ceylon, in the East, are as small as Goats. The Bison wears a shaggy mane like that of a Lion, and a hump on its back like that of a Camel, with all which it parts when domesticated, and becomes a Cow. The eyes of the savage breeds are fierce and terrific; those of the dairy are dull and heavy. Even among those that have been tamed, the greatest diversity in size, shapes, dispositions, and uses, prevails, not only in different countries, but almost in every shire. The Cows of Britain, whether reared for the dairy or the knife, have large fleshy bodies, but are dull and grovelling animals, void of sagacity; while the Cows of the Hottentots are so tractable, as to be intrusted by their owners with the charge of other animals, like our Sheep Dogs. She fights her master's battles, gores his enemies with her horns, lives in the same house with her owner, and becomes his particular favourite and companion. They are called Backeley. Our dairy Cows are feeble and inactive, whilst those of the Tartars are used in riding and drawing carriages. In Hindoostan the Cows draw the coaches, and keep up with Horses at full trot; and the Hottentots train their Cows to gallop and run down the Elk Antelope. Some of our Bulls are savage, dull, and inactive, whilst others may be trained to the plough, &c. The Dutch and Lincoln are large. The Highland breed is small. The Irish and Lancaster breeds have very long horns, and those of Galloway and Suffolk have none.

These are not so many different species as some have imagined; but all of them are one species, which propagate with each other. Not only the dairy and feeding breeds are derived from the same origin, but the Urus, with all its magnitude, its massy horns and shaggy mane; the Bison, with its rough hide and large hump; the little, neat, and slender limbed Zebu of the East; the Backeley, with all its sagacity, and the over-fed Dutch, and old Lincoln Cow, with all its grovelling stupidity; are one and the same species of animal: all their diversities of figure, size, disposition, and qualities, proceed from a diversity of climate, feeding, or treatment; and prove, to a demonstration, that by human skill and industry greater changes may yet be effected†. — See Mr. AITON's *Reports of Scotland*, p. 411, 1811.

more places: they are found, however, in a purer state in Chillingham Park, in Northumberland, the Seat of the Earl of TANKERVILLE."—Mr. AITON's *Report of the Agriculture of Scotland*, page 44.

* The account of the Buffalo will be given more at large with other animals, and his purposes of labour; the Horse, the Camel, and the Elephant.
† "The wild Cattle are to be found in Hamilton Park, in the county of Lanark, the seat of the Duke of HAMILTON, Adrossan, in Ayrshire, belonging to the Earl of EGLINTOUN; also at Auchirive Park, in the same county, the Seat of RICHARD OSWALD, Esq. and perhaps in one or two

DIMENSIONS OF THE WILD CATTLE OF BRITAIN, &c.

						WILD BULL.			WILD COW, 7-yrs. old.			WILD OX, 6-yrs. old.			NORMAN BULL.			AFRICAN BULL.			WILD BISON BULL.			BUFFALO OX.		
						Ft.	In.	Qrs.	Ft.	In.	Qrs.	Ft.	In.	Qrs.	Ft.	In.	Qrs.	Ft.	In.	Qrs.	Ft.	In.	Qrs.	Ft.	In.	Qrs.
Height of the	-	-	-	-	-	4	2	0	4	1	0	4	4	0	4	2	$\frac{3}{4}$	3	10	0	4	2	0	4	10	9
						4	6	0	4	1	0	4	2	0	4	5	$\frac{1}{2}$	3	9	0	6	2	0	4	9	0
						1	0	$\frac{1}{2}$	1	0	0	1	0	0	1	1	0	1	2	0	1	3	0	1	2	0
						1	6	$\frac{1}{2}$	1	4	$\frac{1}{2}$	1	6	4	1	6	0	1	3	$\frac{1}{2}$	1	6	0	1	7	0
From the Ground to the	-	-	-	-	-	0	0	0	1	7	$\frac{1}{2}$	1	3	0	1	3	$\frac{1}{2}$	1	0	0	2	1	0	1	10	0
						0	0	0	0	0	0	1	8	0	1	7	$\frac{3}{4}$	1	7	0	2	3	0	2	0	0
Length of, or from the	-	-	-	-	-	0	0	0	0	0	0	2	2	$\frac{1}{2}$	2	1	0	1	11	$\frac{3}{4}$	2	0	6	1	10	0
						5	11	0	6	2	0	6	6	0	6	9	0	6	7	0	7	1	9	6	3	$\frac{1}{2}$
						1	8	0	0	0	0	1	6	0	1	8	0	1	6	0	2	0	0	1	10	0
						1	4	$\frac{1}{2}$	1	3	$\frac{1}{2}$	2	10	0	0	10	0	0	8	0	1	6	0	1	8	$\frac{1}{4}$
						1	6	$\frac{3}{4}$	1	5	0	1	6	0	2	0	0	1	2	0	1	3	0	1	4	0
						3	0	0	2	9	$\frac{1}{2}$	0	0	0	4	1	0	3	1	4	4	6	0	3	6	0
						3	10	0	0	0	0	0	0	0	3	5	0	3	4	0	4	4	0	3	2	0
						5	10	0	5	1	$\frac{1}{2}$	7	0	0	6	8	$\frac{1}{2}$	5	4	$\frac{1}{2}$	7	6	0	7	2	0
Round the	-	-	-	-	-	1	0	$\frac{3}{4}$	0	0	0	2	2	0	1	1	0	0	11	$\frac{3}{4}$	1	1	0	1	2	0
						0	7	$\frac{1}{2}$	0	7	0	0	7	$\frac{3}{4}$	0	7	0	0	7	0	0	8	$\frac{1}{2}$	0	9	0
						0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	1	2	0	1	2	$\frac{1}{2}$
						0	0	0	0	0	0	0	3	0	0	0	0	1	0	$\frac{1}{2}$	1	3	9	1	5	$\frac{1}{4}$
						0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	8	$\frac{1}{2}$	0	9	0
						0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	2	0	1	4	0
						0	9	$\frac{1}{2}$	0	7	$\frac{1}{2}$	0	10	0	0	8	$\frac{1}{2}$	0	7	0	1	1	0	0	10	0
						0	10	0	0	9	0	0	9	$\frac{1}{2}$	0	11	0	0	7	$\frac{1}{2}$	1	2	0	0	11	0
Breadth of the	-	-	-	-	-	1	6	0	1	4	0	2	2	0	1	8	0	1	5	0	1	11	0	2	6	0



London, Pub: July 20th 1801, by G. Garrard. Agricultural Museum, 23, George St. Hanover Sq.

A NORMAN BULL.

In the Possession of the Duke of Bedford.



London, Publ: July 20th 1801, by G. Yarard, Agricultural Museum, 28, George St, Hanover Squ.

AN AFRICAN BULL.

from the Banks of the River Sierra Leone.



BISON.

Origin of the Ox Species

Published March 1, 1814, by G. Garrard London.



London, Pub. July 20, 1805, by G. Garrard, Agricultural Museum, 28, George St. Hanover Squ.

A BUFFALO COW.

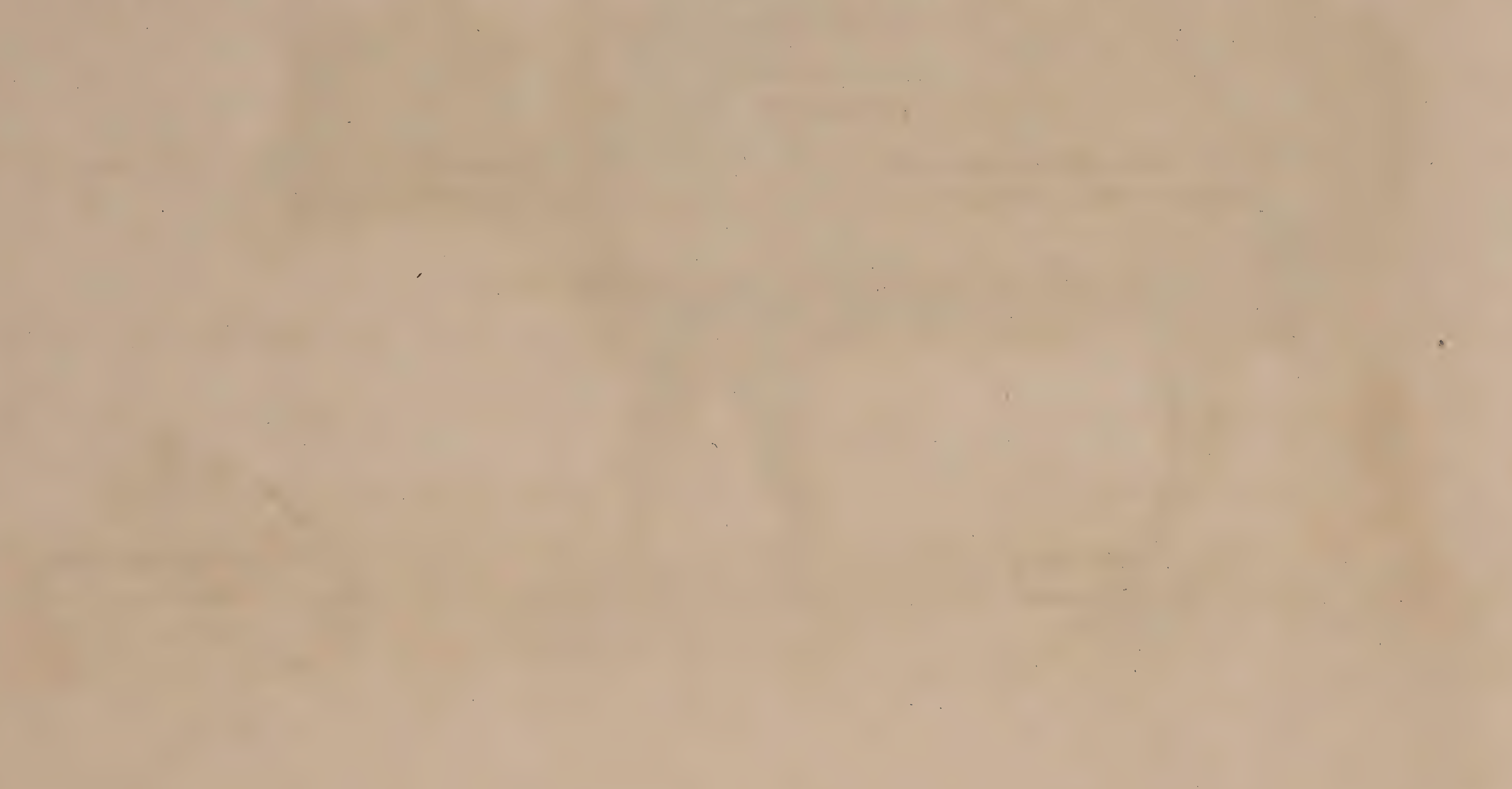
Height of Shoulder.....	ft in
From Pole to Tail.....	4.9
Length of Head.....	6.0
D. of Horn.....	2.0 $\frac{3}{4}$
	1.0 $\frac{1}{2}$

Round Chest.....	ft in
Cross Hips.....	7.3
Brisket to Ground.....	2.6
Bone fore Leg.....	1.16
	0.9

THE UNIVERSITY OF CHICAGO

LIBRARY

1000 N. EAST 58TH ST. CHICAGO, ILL. 60630



CONCLUSION
OF
GARRARD's
HISTORY OF IMPROVED BRITISH CATTLE.

CONTAINING

THIRTEEN PLATES.

TEES-WATER BULL, COW and FAT OX.---HIGHLAND BULL, COW and FAT OX.---PEMBROKE OX, KERRY BULL and FAT SHORT-HORNED COW.---DUNLOP BULL and COW.---WILD BULL and WILD BISON.

ALSO,

FIVE SHEETS OF LETTER-PRESS,

Giving an Account of the Tees-Water Cattle, the Welsh, Kerry and Shetland Cattle; the Scotch Cattle and the British Wild Cattle: with Observations on the Bison, and the Buffalo; and a Summary of British Cattle.

Price to Subscribers, each Print, 2s. 6d. plain; 5s. coloured. The whole Work, containing 52 plates, £6. 10s. plain;---£13. coloured, Letter-press included.

Subscriptions received at Mr. GARRARD's, 23, Old Bond Street, and No. 4, Queen's Buildings, Knightsbridge.

Although Mr. Garrard is now chiefly occupied in the Art of Sculpture, he purposes occasionally to publish Prints of any extraordinary Prize Cattle, &c. to make his Work more complete, by way of Appendix; and he also intends to give Prints and Descriptions of HORSES, upon the same Plan.

JANUARY 1, 1815.

